INDIAN FAMINE
COMMISSION
REPORT 1898

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Indian Famine Commission, 1898.

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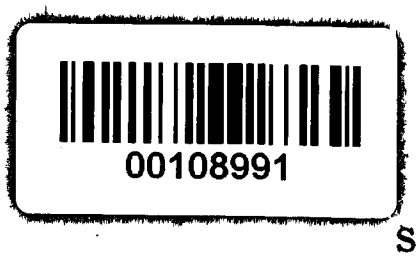

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Extract from the Proceedings of the Government of India in the Department of Revenue and Agriculture,—No. 35—245-26 (Famine), dated the 23rd December 1897.

READ—

(1) Despatch to Her Majesty's Secretary of State, No. 86, dated 25th November 1897.

(2) Telegram from Her Majesty's Secretary of State, dated 22nd December 1897.

RESOLUTION.

It has been decided, with the approval of Her Majesty's Secretary of State, to appoint a small Commission to formulate for future guidance the lessons which the famine experience of 1897 has to teach. The Governor General in Council will take another opportunity of publicly expressing his appreciation of the manner in which the operations for the relief of distress have been conducted; while any complete review of them must await the receipt of the provincial reports. But the information already at his disposal warrants him in believing that, regarded with reference to their object which was to prevent the loss of human life from starvation at the smallest expense to the tax-paying community, those operations have on the whole been conspicuously successful.

2. As was to be expected, however, the methods by which that object has been attained, and the measure of economy which has been secured in the administration of relief, have not been the same in all provinces. The organisation for the relief of distress which has been elaborated in each province on the lines laid down by the Famine Commission of 1878, and embodied in the Provincial Famine Codes, has now, for the first time in most of the affected provinces, been practically tested on a large scale; and on the whole it has stood the trial well. But while the experience of the past year has suggested no alterations in the main lines which were prescribed as the basis for the administration of relief, it has been found necessary, in almost every province, to depart in some not unimportant respects from the detailed provisions of the local Code in order to meet the differing conditions of distress. And the direction which these departures have taken has varied from province to province.

3. The experience thus gained will be of incalculable value when India is next face to face with famine. But in order to render it available for future guidance, it is essential to collect and collate it while the facts are fresh, and to embody it in amended Famine Codes. It is no doubt the case that, while the broad lines upon which relief is to be administered may properly be prescribed for the whole of India, variations in detail will be necessary under the varying conditions to be found in the several provinces, and that each province must retain its individual Code. But it is certain that almost every province will have something to learn from the experience of others, and it will be advisable to take special measures to collate that experience; and especially, where the cost of relief and the numbers relieved have been larger than elsewhere in proportion to the acuteness of the distress and the population affected by it, to enquire to what causes the excess was due, and whether an adherence to the lines followed in other provinces might not, on a future occasion, reduce the cost without diminishing the efficacy of the measures to be adopted.

4. The enquiry will be far narrower in scope than that entrusted to the larger Famine Commission, which was appointed with such signal advantage in 1878. Twenty years ago no general famine policy had been enunciated by Government; the experience gained in Behar in 1873 and in Southern India in 1877 from what were virtually experiments in relief, was all that was available, and the Commission had to formulate a policy and to evolve general principles for guidance in the actual presence of famine. But this was, perhaps, the least important portion of their duties. They were also bidden to consider and advise upon measures of the widest possible nature, such as might "diminish the severity of famines, or place the people in a better condition for enduring them." The programme that was laid down by them accordingly under the head of "Measures of protection and prevention" has since then been actively prosecuted; and though much still remains and always will remain to be done, the omissions and defects are fully recognised, and are gradually being dealt with as opportunity offers, and no further general enquiry of this nature is either necessary or advisable. So, too, the experience of the past year has shown that the general lines of policy laid down in 1878 stand in no need of reconsideration. It is the details of the scheme of relief that require to be revised. But in such a matter details are hardly less important than principles.

5. The duties of the Commission will therefore be—

to examine the manner in which the provisions of the Famine Codes of the several provinces differ from one another, and in which their prescriptions have been departed from;

to inquire into the degree of success which has in each case attended the measures adopted, considered primarily with regard to the relief of distress and the saving of human life, and secondarily with regard to economy;

to advise as to the measures and methods of working which seem likely to prove most effective in these two respects; and

to make any inquiries and record any recommendations or opinions which it is thought will prove useful in the case of future famines.

It is to be understood that the object of the inquiry is to furnish guidance for the future; and that it is concerned with the past, only in so far as may be necessary to that end.

6. The President of the Commission will be Sir James Broadwood Lyall, G.C.I.E., K.C.S.I., late Lieutenant-Governor of the Punjab. The Members of the Commission will be Surgeon-Colonel Richardson, lately Inspector General of Civil Hospitals, North-Western Provinces and Oudh; Mr. T. W. Holderness, I.C.S., lately Deputy Secretary to the Government of India in the Department of Revenue and Agriculture (Famine); Mr. T. Higham, C.I.E, Inspector General of Irrigation and Joint Secretary to the Government of India in the Public Works Department; and Rai Bahadur Bipin Krishna Bose, M.A., B.L., Government Advocate, Nagpur, and Secretary to the Provincial Committee of the Famine Charitable Relief Fund. Mr. H. J. McIntosh, I. C. S., will be Secretary to the Commission. The representation upon a small Commission of each province affected by the late famine is impossible; but the Government of India desire that each Local Government should nominate, to be attached to the Commission as a temporary Member while they are actually making inquiries within the province, one of its own officers who is personally acquainted with the practical working of the system of relief adopted, and whose presence will ensure that material points are not overlooked or misunderstood.

7. The Commission will be formally constituted on the arrival of Sir James Lyall and Dr. Richardson from England. They will probably wish to visit Bombay, Madras, Bengal, the Central Provinces, the North-Western Provinces and Oudh, and possibly Berar, and to make inquiries upon the spot; but the Governor General in Council desires to leave the matter of method and procedure in the investigation with which they are charged entirely to their discretion. The general conduct of the inquiry and the regulation of the course of business before the Commission will be entrusted to the President in communication with the Members. The Commission, through their Secretary acting under the instructions of the President, will correspond direct with Local Governments and Departments of the Government of India, and with any local authorities with whom direct communications may be authorised by Local Governments as a matter of convenience and in order to save time; and it is requested that all communications or requisitions for information emanating from them may be treated as urgent and complied with promptly, and that in the event of the Commission visiting a province, they may be afforded every facility for their inquiries.

ORDER.—Ordered, that copies of this Resolution be forwarded to the Local Governments noted in the margin, to the Secretary to the Famine Commission, and to the Foreign, Public Works, Home, and Finance Departments of the Government of India for information.

Government of Madras.
" Bombay.
" Bengal.
" N. W. P. and Oudh.
" Punjab.
Government of Burma.
Ch. Commr. of C. P.
" Assam.
" Coorg.
" Ajmere.
The Resident at Hyderabad.

Ordered also, that it be published in the Supplement to the *Gazette of India* for general information.

By order,

DENZIL IBBETSON,

Secretary to the Government of India.

References to the Report of the Famine Commission, 1898.

Memorandum on the differences in the Provincial Famine Codes.

This memorandum examines the manner in which the provisions of the Famine Codes of the several provinces differ from one another. The Codes dealt with are those of Bengal, Madras, Bombay, the North-Western Provinces and Oudh, the Punjab, the Central Provinces, and Burma.

The Provisional Code was promulgated with the Government of India's Circular No. 44-F., dated 9th June 1883. The Code was declared to be distinctly provisional, and in paragraph 6 of the circular permission was given to prepare, if required, a separate Code for each province. Madras, it seems, had already framed its own Provincial Code; and in course of time separate Codes were prepared and sanctioned for the different provinces.

In 1889 the Government of India deemed it expedient to subject the procedure founded upon the Provisional Code of 1883 to fresh scrutiny in the light of the experience gained in various parts of India since that time, and accordingly Circular No. 63—77-C., dated the 19th December 1889, was issued, asking the opinion and advice of Local Governments and Administrations on the working of the existing Codes, and more especially on certain points specially mentioned as deserving consideration. Orders on these points were issued by the Government of India in Circular No. 25—1, dated 10th September 1891, and Local Governments were asked to submit copies of rules drafted in accordance with the instructions issued for incorporation in the Provincial Codes. Subsequently, further orders were issued by the Government of India regarding the forms of reports to that Government in Circulars Nos. 5—48, dated 2nd March 1892, and 7—48, dated 18th March 1892, and regarding programmes of famine relief works in Circular No. 8—52, dated 21st March 1892. In Government of India Circular No. 6—44, dated 17th March 1892, certain instructions were issued and inquiries made regarding the practice in the different provinces in respect of relief works, wages, etc., and on receipt of replies to that circular definite orders were issued by the Government of India in Resolution No. 35, dated 24th August 1893. The Resolution concluded by directing the submission by each province of a revised draft Famine Code, based on the lines of that and the previous resolutions. In a subsequent Circular No. 16, dated 30th July 1894, some additional instructions were issued regarding the preparation of Famine Relief Programmes. The revised Codes, called for in the Resolution of 24th August 1893, were in due course submitted by Local Governments and sanctioned by the Government of India, and as subsequently amended from time to time they constitute the Codes which are examined in this memorandum. The existing Codes are therefore based upon the Provisional Code and the Resolutions of the Government of India referred to above and noted in the margin.

No. 63—77, dated 19th December 1889.
No. 25—1, dated 10th September 1891.
No. 5—48, dated 2nd March 1892.
No. 6—44, dated 17th March 1892.
No. 7—48, dated 18th March 1892.
No. 8—52, dated 21st March 1892.
No. 35, dated 24th August 1893.
No. 16, dated 30th July 1894.

In the Resolution of 24th August 1893 (paragraph 16), a uniform system of division into chapters was prescribed. The Codes consist of two parts—Part I relating to "Previous to Famine," and Part II relating to "During Famine." In Bengal, Madras, Bombay, and the Punjab, the Codes are actually divided into Parts I and II. In the North-Western Provinces, the Central Provinces and Burma this is not so, but the headings of the chapters indicate with sufficient clearness the distinction. All the Codes except Madras and Burma have been divided into the fifteen chapters prescribed by the Government of India. In the Madras Code, village gratuitous relief, the poor-house and kitchens are all dealt with in one and the same chapter; measures for the protection of cattle and the utilization of forests are combined in the same chapter, and there is a chapter (V) not found in any other Code entitled "Nature of Relief Measures to be

adopted." In the Burma Code there are no provisions relating to poor-houses, kitchens or "Other Measures of Relief," and there is a final chapter entitled "Closure of Relief Works." In addition to the fifteen prescribed chapters, the Bombay Code contains a chapter entitled "Miscellaneous Provisions."

CHAPTER I.

DUTIES OF REVENUE AND VILLAGE OFFICERS IN ORDINARY TIMES.

The general scheme provides for periodical reports by the subordinate agency available as to crops, rainfall, health of cattle, and all other circumstances affecting agricultural prospects; and also for special reports when local retail prices rise by a certain percentage above normal rates. It imposes upon Commissioners of Divisions and District Officers the duty of receiving and forwarding these reports, and of keeping themselves fully acquainted with the condition of the people of their respective charges. The same officers are also primarily responsible for maintaining statements of areas liable to famine and effective programmes of relief works for use within those areas. It prescribes periodical inspection of such areas by the Director of Land Records and Agriculture, and the maintenance in his office of a proper system of compilation of facts and statistics bearing on the agricultural circumstances of every tract in the province.

"*Periodical Reports,*" *as to weather, crops, condition of the people, etc.*—The most important matter to notice in connection with these reports is that in Bengal the information comes from the police, while in other provinces it comes from the subordinate revenue agency. The reason, of course, is that there is no suitable subordinate revenue agency in Bengal. The provisions in this respect of the other Codes vary considerably in detail according to local circumstances and revenue administrative arrangements.

Thus, in Madras, weekly reports are submitted by the revenue inspector of every circle or range to the tahsildar, and monthly statements of the progress of cultivation by the village accountants of ryotwari villages through the revenue inspectors. Abstracts of these returns are submitted to the Collector and by him to the Agricultural Department of the Board of Revenue. Monthly and weekly statements of prices and rainfall are prepared at selected stations and are submitted through the Collector to the Board of Revenue whose duty it is to collect and maintain information as to the general agricultural condition of every district. In Bombay the duty is laid on the village officers of reporting to the circle inspector the existence or prospect of distress, while the circle inspector is required to note in his weekly diary all important matters bearing upon the condition of the people, the cattle, the crops, etc. On receipt of unfavourable reports, the mamlatdar, or above him the Subdivisional Officer, must make special inquiries: the mamlatdars have to submit periodical rain returns to the Director of Agriculture, giving particulars as to whether the rainfall is sufficient or otherwise. The Code of the North-Western Provinces imposes upon the patwari the duty of reporting the general condition of the crops, etc., and the occurrence of any special calamities in his circle, and upon the registrar kanungo the duty of submitting these reports to the Collector through the tahsildar. The tahsildar is required to report to the Collector all calamities of season affecting the crops or the people, to supervise the kanungos and patwaris and to register the rainfall. According to the Central Provinces Code, each district is supposed to be divided into "relief circles" under an inspector; ordinarily the revenue inspector's circle is the relief circle and the revenue inspector is the circle inspector; above the inspector is the tahsildar who is *ex-officio* within his tahsil a Superintendent of circle inspectors or Subdivisional Officer as he is called, and above him is the Deputy Commissioner. Regular reports are submitted by patwaris through this channel. In the Punjab a systematic record

References to the Report of the Famine Commission, 1898.

of the agricultural statistics of every estate, tahsil and district has been carried out since 1885, and it is the duty of the Deputy Commissioner, and above him the Commissioner, to maintain the village record agency and the supervising (kanungo) staff in a state of thorough efficiency and to utilize the information so furnished. Regular information comes up to the Deputy Commissioner through the channel of village headmen and zaildars, patwaris, field kanungos and tahsildars. All tahsils are divided into "relief circles" and to each circle is appointed a person who in the event of famine will be the circle inspector. This circle organisation has always to be kept in working order, ready to be put into operation at once. In Burma weekly information comes up to the Deputy Commissioner from Township Officers. In every case the arrangements for reporting seem to be efficient. In the Punjab and the Central Provinces, it will be observed, each district is at all times divided into "Relief Circles."

Special Reports on fluctuations of prices.—These are prescribed in the Resolution of 10th September 1891, the report to be made when prices of staple food-grains show a rise of 20 per cent. above the normal. The Madras Code (section 2) prescribes 25 per cent. in the case of rice and 33 per cent. in the case of other food-grains, while the North-Western Provinces Code (section 7) prescribes 25 per cent. The duty of submitting these reports is laid on the Collector or Deputy Commissioner, but in the Punjab Code (section 7) it lies equally upon the Director of Agriculture.

Duties of Collectors and Commissioners.—All the Codes make it sufficiently clear that it is the duty of the $\frac{\text{Collector}}{\text{Deputy Commissioner}}$ to keep himself thoroughly acquainted with the agricultural condition of his charge, and in most of the Codes the same duty is definitely laid upon the Commissioner. In some Codes, *e.g.*, Bombay and the North-Western Provinces, the Commissioner's responsibility in this respect is implied rather than definitely expressed. In Madras where there are no Commissioners the duty is laid on the Member of the Board in charge of Land Records and Agriculture.

Duties of the Director of Agriculture.—The rules laid down in paragraph 5 of the Resolution of 10th September 1891 are observed in all the Codes. In Madras, where there are no Commissioners, the Member of the Board of Revenue in charge of Land Records and Agriculture is the advising officer of Government in all matters of relief administration, and all operations under the Famine Code are carried on under his direction and control. His sphere of action is consequently different from that of the Director of Agriculture in other Provinces. The Punjab Code, section 7, imposes very definitely upon the Director of Agriculture the duty of bringing to the notice of Government abnormal features indicating the approach of scarcity, and in this respect differs somewhat from the other Codes. The Burma Code requires from him an annual report touching upon all points interesting from a famine point of view.

Chapter VI. Paragraphs 406—413.

Programmes of Relief Works.—From Form C, prescribed by the Government of India, it will be seen that programmes of relief works are required to be maintained to give employment for three months to the maximum number of persons likely to require relief in the event of serious famine. The Bombay Code (section 12) and the Punjab Code (section 29) provide for six months, and the Burma Code (section 5) for two years; the Madras Code (section 8) provides for a minimum of 20 per cent. of the population of the district for three months or the maximum number likely to require relief if that exceeds 20 per cent.

The details of the provisions regarding the preparation of statements of areas liable to famine and relief programmes are different in the various Codes: the responsibility attaches in varying degrees in different provinces to the District Officer, the Commissioner, the Agricultural Department, and the Officers of the Public Works Department.

In Bengal the programme of famine relief which is prepared by the Collector and submitted by him to the Commissioner is divided into two parts, *viz.*, large works and small works, and is prepared thanna by thanna. The Collector has to call upon the District Engineer for the information regarding small works and upon the Executive Engineer (or the Superintending Engineer if there is no Executive Engineer) for the information regarding large works. These programmes are to be revised annually. The Commissioner forwards them when received from the Collector to the Local Government and the Local Government, after they have been examined in the Revenue and Public Works Departments, submits them in a consolidated form to the Government of India. In Madras the Collector is the officer responsible for maintaining programmes of relief works of all kinds. The Public Works Department has to maintain in its budgets a number of major works and repairs for each district, the execution of which in ordinary seasons would last four years, and of such a character as to ensure their execution in ordinary years irrespective of famine. For works under Local Funds, Municipal Funds, and Special Funds, the Collector has to consult the local authorities, and he has himself to suggest civil agency works. The entire scheme of these works forms the district programmes. An abstract of the district programmes is submitted annually by the Board to the Government of India. According to the Bombay Code the Secretary to Government in the Public Works Department, in communication with Commissioners, is responsible for maintaining the programme of relief works for each district. The programmes are to include the small relief works programme which is prepared by the Collector in communication with the Executive Engineer. The Director of Agriculture is responsible for information as to the liability of each district to famine, and the Commissioner for the number of persons likely to need relief and the programme to be adopted. In the North-Western Provinces the Collector, under the Commissioner's sanction, is responsible for maintaining a programme of small works (as defined in section 65), certain classes of which will if possible be executed by private agency assisted by takavi advances. The Commissioner in consultation with Collectors, the Public Works Department and the Director of Agriculture decides the number of persons to be provided for and the programme of relief works to be adopted. The Chief Engineer, in communication with Commissioners and district authorities, maintains the programme of *all* relief works for each district and division. In the Central Provinces the Director of Agriculture is responsible for information as to the liability of each district to famine and the general character of the protective measures required. The Commissioner is responsible for deciding, in communication with district officers, the Public Works Department and the Agricultural Department, the number of persons for whom work should be provided, the programme of works to be adopted, and for the inclusion in the programme of a list of village works drawn up in communication with the Agricultural Department and sanctioned by Government. In the Punjab the Commissioner is responsible for deciding, in communication with district officers and the Public Works Department, the number of persons for whom relief works should be provided and the programme of relief works to be adopted. The Deputy Commissioner frames the programme of both small and large works after first consulting the Executive Engineer as to large works, and this programme is submitted to the Commissioner. The Commissioner before sanctioning it must first consult the Superintending Engineer as to the large works. After sanctioning the programme, the Commissioner sends it to the Public Works Department Secretary to Government who adds such projects in the Irrigation Department as he thinks suitable and then forwards it with his remarks to the Financial Commissioner. The Financial Commissioner submits the programme with his remarks to Government in the Civil Department; it is examined by the Public Works Secretary and finally sanctioned by Government in the Civil Department. After he receives back the sanctioned programme, the Deputy Commissioner sends a copy to the Superintending Engineer for the preparation of plans and estimates of large works. In Burma the Commissioner is responsible for deciding, in communication with

References to the Report of the Famine Commission, 1898.

district officers, the Public Works Department and the Director of Agriculture, the number of persons for whom relief works should be provided and the programme of relief works to be adopted. The programmes are prepared by the Deputy Commissioner in communication with the Executive Engineer.

One point to be noticed is that in the Bengal Code (section 5) certain districts, believed to be not liable to famine, are exempted from submitting these statements and programmes—two of which actually suffered during the recent scarcity.

Boards of Revenue and Financial Commissioners.—In Bengal and the North-Western Provinces, the Boards of Revenue find no place in the chain of famine relief administration. In the Punjab and Burma, the Financial Commissioner has responsible duties assigned to him.

CHAPTER II.

DUTIES OF REVENUE AND VILLAGE OFFICERS WHEN SERIOUS SCARCITY IS IMMINENT.

All the Codes provide for indications of distress being reported through the medium of the administrative chain referred to in the preceding chapter at as early a date as possible, for the submission of detailed reports, opening of test works, strengthening of the district staff and the necessary provision of funds. According to the Bengal Code (section 8), the first warning to Government should be a demi-official communication from the District Officer—a provision peculiar to Bengal. The Punjab Code differs from the other Codes in so far as it reads as if the first indications of distress were to come from above instead of from below: it provides that the direct control of all famine operations rests with the Local Government, that the Financial Commissioner is to receive from Government copies of all weekly reports and returns and be consulted on all matters of principle relating to famine relief, that in the earliest stages of anticipated distress or famine the official staff should be warned by the Financial Commissioner to be on the alert, and that Commissioners should be desired to inspect their Divisions. The Madras Code (section 14) provides for the Member of the Board of Revenue in charge of Land Records and Agriculture visiting the distressed tract, and the Burma Code (section 24) imposes the same obligation upon the Director of Agriculture.

Chapter VI. Paragraphs 418—421.

The Madras Code (section 16) expressly provides for making an increase of *ordinary works* so as to give employment to greater numbers than usual, and the Punjab Code (section 106) and North-Western Provinces Code (section 60) have provisions somewhat similar in effect.

Chapter IV. Paragraph 236.

The Bombay Code (section 23) contemplates the formation of a Famine Department in the Secretariat when famine is imminent.

The Bengal Code [section 15 (3) (*b*)] contemplates the possibility of suspensions and remissions of land revenue, but contains no express instructions on the subject. The Madras Code (sections 18 and 19) contemplates early inquiries regarding the propriety of granting these, and so does the Bombay Code [section 22 (7) and Chapter X]. In Bombay the Collector has authority to order suspensions pending further inquiry. The North-Western Provinces Code (section 23) expressly provides that at the outset impending distress may be met by suspensions or remissions. The Central Provinces Code (section 14), the Punjab Code [section 43 (*h*)], the Burma Code [section 22 (*g*)], all provide for their grant.

All the Codes contemplate the grant of statutory loans and advances. The Madras Code (section 20) lays special stress on encouraging the people to take them, while the North-Western Provinces Code (section 23) and the Central Provinces Code (section 14) specially provide for them as a means of meeting impending distress.

CHAPTER III.

References to the Report of the Famine Commission, 1898.

DURING FAMINE. DUTIES OF SUPERIOR REVENUE AND ENGINEER OFFICERS.

Reports.—So far as this chapter deals with the preparation and submission of reports, it is unnecessary to make any remarks. Those required by the Government of India are prescribed, and, as regards those required by Local Governments from their officers, it is not proposed to discuss the details.

Local Bodies: their executive position in Famine Relief and their liability to incur expenditure under this head.—It is explained, in paragraph 11 of the Resolution of 9th June 1883, that in framing the definition of "District Authority" the Government of India had in view the probability of the District Officer being assisted in carrying out the duties of famine relief by Local Boards constituted by law; the District Officer was in any case to be the responsible head and director of famine operations within his district, it being left to Local Governments to decide to what extent the principle of associating with him local bodies was to be carried out. With the exception of the Central Provinces [sections 1 (*t*), 21] all Local Governments have abandoned the use of the term "District Authority."

The Bengal Code (sections 17, 18 and 19) very clearly recognizes the liability of the District Boards. It declares that District Boards form an integral part of the Administration, that they are the primary agency available for coping with famine, and that they must subordinate the ordinary objects and methods of their expenditure to the special consideration of saving life. This primary obligation having been carried out, it remains for the Government to supplement, if necessary, the resources of the Boards. Section 18 declares that their relief operations, whether in the form of gratuitous relief, poor-houses, kitchens for children or relief works, are to be regulated by the provisions, and their officers to be subject to the rules, laid down in the Famine Code.

The Madras Code (section 33) says that Local and Municipal Bodies are expected to devote their funds, as far as the law allows, to famine relief. Local and Municipal Funds, it appears, cannot be legally applied to gratuitous relief, but are available for relief works, and the provisions of the Code relating thereto are nearly identical in wording with the Bengal Code. Pound funds when not needed for the construction, maintenance or improvement of pounds may be devoted to the construction and repair of roads and bridges and to other purposes of public utility at the pleasure of Government.

The Bombay Code [section 31 (*c*)] merely says that the Collector shall utilize, as far as possible, the agency of District and Municipal Boards and Local Committees, while section 18 says that ordinary works in progress or required by Local Boards should be utilized as test works.

The remaining Codes, North-Western Provinces (section 26), Punjab (section 52), Central Provinces (section 18), Burma (sections 33 and 34), lay down the duties of District Boards in practically identical language with that used in the Bengal Code, except that section 18, Bengal, is not reproduced, while the Punjab and Burma Codes also contemplate the utilization of the resources of Municipal Committees.

Duties of Revenue and Engineer Officers.—As regards the duties of Superior Revenue and Engineer Officers, all the Codes with the exception of that of the Central Provinces define the position of the District Officer in terms which are essentially the same. They declare that the district is the unit of relief administration, and the Collector or Deputy Commissioner, subject to the general control of the Commissioner, the agent of Government for carrying out the measures of relief that may be determined on. He exercises general supervision over all works and arrangements for giving relief within

Chapter VI. Paragraph 423.
Chapter IV. Paragraphs 235—237.

References to the Report of the Famine Commission, 1898.

the district and is responsible to Government for their efficiency. His decision must be accepted in all matters relating to the employment and wages of the labourers, the opening or closing of works, and generally in all matters which are not of a purely technical nature. Officers of all departments employed on famine duty within the district are required to take their orders from him on all points not strictly professional. In order to show what differences in procedure exist, it is desirable to deal with each Code separately, to state what provisions each Code contains, and to bring in here some matters dealt with in other chapters of the Code—particularly the relief works chapter.

Bengal Code.—In the Bengal Code (section 22) the position of the District Officer is defined in the general terms given above, and it is stated that within their subdivisions Subdivisional Officers are, *mutatis mutandis*, responsible for the performance of the duties laid down for Commissioners and District Officers. The Commissioner (section 20) exercises administrative control over all relief measures by the District Officer, or by District or Local Boards, and is responsible for enforcing all rules laid down in the Code. He is also empowered to control the famine relief operations of the Public Works Department except in matters of a purely technical character. It is his duty (section 19) to propose, in consultation with the Superintending or Chief Engineer, the action to be taken by the Public Works Department, and also to prescribe the action to be taken by District or Local Boards. Section 22 directs that from the outset he should direct his attention among other matters to advising the Superintending Engineer as to the best distribution and employment of the Public Works agency in his division. The duties of officers of the Public Works Department are not defined in Chapter III of the Bengal Code, but they are referred to incidentally in sections 19, 20 and 21 noticed above. In the chapter dealing with relief works, besides the classification of "large" and "small" works (each under professional supervision so far as possible), there is a further distinction drawn between works carried out by the Public Works Department from Provincial or Imperial Funds and works carried out from local funds by the District Board or District Officer; it is stated that most, if not all, of the relief works will fall under the latter class, while the works carried out by the Public Works Department will consist only of large projects, such as railways, canals, etc., and will employ only able-bodied labourers. Section 59 provides that for every relief work there shall be an officer in charge appointed by the civil authorities, and that if he is an officer of the Public Works Department, he shall in his capacity as officer in charge be subject to the control of the civil authorities (Commissioner and Collector). His responsibilities are defined and include the adjustment of rates and payment of wages. The relief works chapter contains a brief section dealing with works under the Public Works Department. It provides that the rules for other relief works shall apply, as far as possible, to those under the Public Works Department, that, as a rule, there shall be not more than one such work in each subdivision, and that the officer in charge shall submit his returns and reports to the District Officer. The only responsibility assigned to the Superintending Engineer (section 93) is that of issuing timely instructions for the provision of tools, etc., and in section 97 he is permitted to order a copy of the returns and reports submitted by the officer in charge to the District Officer to be forwarded to himself.

Madras Code.—In the Madras Code (section 24) the duties of the District Officer are defined in the usual general terms, and in Chapter IV, which treats of the division of districts, it is directed (section 52) that under Collectors the Divisional Officers (whose charges comprise several taluks) will organize and administer the different kinds of relief measures within their charges, and that they will be responsible for the check and audit of famine expenditure under all heads except outlay on those works the audit of which rests with Public Works or Local Fund Departments. Section 53 provides that if Taluk Relief Officers are appointed, the tahsildars will be subordinate

to them, while section 55 provides that on all large works or groups of works the Collector may appoint a special civil officer to generally supervise and control relief arrangements as distinct from construction. Section 40 also authorizes Collectors to appoint paymasters. There are no Commissioners in Madras, and section 23 provides that if no Famine Commissioner is appointed, the Member of the Board of Revenue in charge of the Department of Land Records and Agriculture will be responsible for the direction of all branches of famine relief, subject to the orders of Government. Provision is made (section 25) for appointing special assistants to Collectors and also to Divisional Officers. The duties of officers of the Public Works Department are defined in sections 41—43. Those of the Chief Engineer are confined to submitting proposals to Government for any necessary increase to establishment, while Superintending Engineers are made responsible for the timely provision of tools, etc., and for arranging to supply executive officers with adequate imprests for payment of relief wages. Then power is given to Public Works officers to address directly any Government officer when injurious delay would ensue by making the reference through his superior officer. In the chapter on relief works it is stated (section 109) that all relief works other than Local Fund works, whether major or minor, will ordinarily be executed in times of famine by the Public Works Department, and section 110 declares that all officers of the Public Works Department posted to affected districts for famine duty will be placed under Executive Engineers of divisions through whom the Collector should issue all orders relating to the management of relief works, the Executive Engineer being subject in purely professional matters to the general supervision ordinarily exercised by the Superintending Engineer. The officer in charge of works (section 94) is generally to be appointed by and under the control of the Collector; when a Public Works Department officer is in charge both of construction and of general arrangements he will, as regards the latter, be under the orders of the Collector.

Bombay Code.—The position of the Collector is defined (section 31) in the usual terms, while section 28 contemplates the appointment of a Famine Commissioner in whom shall be centred the responsibility of directing under the orders of Government all branches of famine relief. If no Famine Commissioner is appointed, each Commissioner of a division (section 29) exercises the control and direction of famine relief. The detailed rules in sections 36—39, regarding the duties of officers of the Public Works Department, contain a very clear and distinct plan of co-operation between the Revenue and Public Works officers. Section 38 asserts the subordination to the Collector of all executive officers of the Public Works Department employed on relief works in all matters not strictly professional, and similarly of all officers of the department below the rank of Assistant Engineers to the Subdivisional Officer. By section 39 the Executive Engineer of a district is made jointly responsible with the Collector for seeing that relief works do not fail in their object. The duties assigned to Chief and Superintending Engineers are specifically defined in section 37 and are such as to indicate the direction by them of works entrusted to the department. In the relief works chapter it is directed (section 67) that the construction of either large or small works shall, as far as possible, be undertaken by officers of the Public Works Department, though small relief works, whether supervised by Civil or Public Works officers, will be under the control of the Collector (section 102). Large relief works are to be conducted by Engineer Officers, but the Collector (section 90) shall appoint to each work or group of works a special civil officer, who should be a Magistrate with summary powers, to supervise such arrangements as do not come under the head of construction. The duties of the special civil officer are defined. Section 97 (*c*) provides that if there is no special civil officer on the work, the Engineer Officer in charge shall in his reports notice the points required in the report submitted by special civil officers.

References to the Report of the Famine Commission, 1898.

North-Western Provinces Code.—The position of the District Officer is defined (section 27), and as regards the Commissioner all that is said (section 29) is that he shall exercise administrative control over all measures undertaken for the relief of famine except in so far as may be provided in such portion of Chapter VI (relief works chapter) as relates to the conduct of large works. Section 64 in Chapter VI provides that the supervision exercised in either large or small works will, as far as possible, be professional, but the chapter contains no special rules for administrative control on large works, and it is not intelligible to what the exception in section 29 refers. In section 31 it is provided that the Chief Engineer in communication with the Commissioner shall decide what ordinary works shall be converted into relief works and what additional works shall be undertaken; he has also (section 33) to submit supplementary programmes, from time to time, to arrange for funds (section 35) and to provide tools, etc. (section 36). Engineer or other officers in charge of works are required (sections 38 to 40) to submit reports as to the condition of the works, etc. and copies of their progress returns to the Collector. As to "officers in charge" all that is said (section 77) is that "the person placed in charge of a separate work shall be called the officer in charge and shall be responsible for the following matters. * * *" These matters seem to include some professional as well as the usual non-professional subjects. The Code is a short one and is very loose and vague as to the management of public works and the way in which officers of the Public Works and Revenue Departments should co-operate.

Punjab Code.—The Punjab Code (section 49) contains the usual declaration as to the control of the Deputy Commissioner, subject to the Commissioner, of all relief measures within his district, and directs that all officers on famine duty shall take orders from him on all points not strictly professional. His duties may be exercised in subordination to him by Assistant Commissioners in such portions of the districts as may be made over to their management. The Commissioner (section 46) exercises full administrative control over all measures except so far as is provided in Chapter VI (relief works chapter), and section 47 states that he should direct his attention among other matters to the employment of the divisional Public Works agency to the best advantage. The duties of the Chief Engineer are confined (section 54) to the following matters, *viz.*, (1) restricting ordinary expenditure, (2) ascertaining that programmes of relief works are kept up, (3) drafting the engineering staff to where it is required, (4) arranging for tools, permanent advances, etc., and (5) restricting returns, reports and accounts to the lowest and simplest degrees. Within their divisions, Superintending Engineers have to perform (section 56) the same duties as those assigned to Chief Engineers and the following, *viz.*, (1) to act as advisers of the Commissioner in all matters connected with relief works and as to what works should be utilized, (2) to arrange for the staff and cashiers for each work, (3) to sanction purchase of tools by Executive Engineers, (4) to maintain, as far as possible, an equal standard of tasks and uniformity of procedure in setting tasks, and (5) to visit the more important relief works and see that the work done is suitable, that the manner in which it is carried out is efficient, and that the staff is sufficient but not excessive. By section 57 the Executive Engineer is made jointly responsible with the Deputy Commissioner for seeing that relief works fulfil their object, and if he sees any shortcomings even in matters not in his special sphere, he should report them to the Deputy Commissioner. Section 58 subordinates every officer of the Public Works Department employed on relief works on all matters not strictly professional to the Deputy Commissioner, and provides that differences of opinion as to technical or professional matters between the Deputy Commissioner and the Engineer Officers shall be referred to the Commissioner through the Superintending Engineer. The Commissioner may give civil officers, below the rank of Collector, the authority of a Collector over Assistant Engineers in charge of relief works in their charge. In the relief works chapter provision is made for the development of ordinary public works under the Public Works Department and

District Boards and Municipalities in the early stage of distress and for the conversion into relief works under the Commissioner's sanction of works under District Boards and Municipalities when distress becomes severe. When these are considered to be insufficient and the Local Government decides that relief works under the Public Works Department are to be undertaken, the Chief Engineer in communication with the Commissioner decides what public works under the Department of Public Works shall be started, and is required to arrange for the redistribution of staff, re-appropriation of funds, etc. Section 120 requires that an official or other fit person shall be put in charge of every separate work; in the case of small works not professionally managed, he is appointed by the Deputy Commissioner; on large relief works the "officer in charge" is appointed by the civil authorities (presumably the Commissioner or Financial Commissioner), and if he is a Public Works officer he will *quâ* officer in charge "remain subject to the control of the civil authorities." The duties of officers in charge and rules of management in the case of all works, large and small, in charge of officers of the Public Works Department are laid down in sections 122—152, and it is provided that they may be modified by the Chief Engineer with the consent of the Commissioner and the approval of Government. The duties of the officer in charge, as defined in section 122, comprise supervision of the professional part of the work (*e.g.*, laying out the work, ganging, fixing of tasks and wages, measuring up and fining) as well as the ordinary miscellaneous relief arrangements. Section 128 permits the Chief Engineer after consulting the Commissioner to issue general or special orders as to the determination of tasks (a copy being forwarded to Government). Section 146 requires the Deputy Commissioner or Civil Relief Officer in charge of a subdivision or tahsil to visit the Public Works Department relief works occasionally, and gives him authority to point out to the officer in charge deviations from the principles of the Code: if the officer in charge, being an officer not under the orders of the Deputy Commissioner, does not agree, the matter has to be reported for the decision of the Commissioner; the points for the special attention of the civil inspecting officers are mentioned and concern the bazaar, sanitation, dependants, the popularity of the works and disputes between the medical officer and the officer in charge. Weekly reports by the officer in charge of the relief work are to be sent, if he is a Department of Public Works officer, to his departmental superior, a copy being forwarded to the Deputy Commissioner; if he is a civil officer, they are sent to the relief officer of the tahsil. Sections 153—158 contain special rules for works, ordinarily small, not under officers of the Public Works Department; these works are under circle inspectors and the relief officer of the tahsil or subdivision; their frequent inspection by the Deputy Commissioner and his assistant is enjoined. The general scheme of the code in respect of relief works would thus appear to be that there should be two sets of works. The first set consists of a few, and ordinarily small, works directly under the Deputy Commissioner and his relief circle officers, while the other set comprises all other works, large or small, under the officers of the Public Works Department. As regards the latter, the officer in charge is to be appointed by the civil authorities, but is generally to be a Public Works officer, and in any case is to work under the officers of the Public Works Department, subject to the co-operative control of the Deputy Commissioner and Commissioner; the Commissioner is the referee even in disputes on professional points, and the Chief Engineer or Superintending Engineer can make no changes without consulting him. Thus the Commissioner exercises supreme control over all relief matters in his division, subject only to the orders of Government.

Central Provinces Code.—According to this Code, when it is determined to take any measures for the relief of famine in the division, the Commissioner (section 19) will exercise administrative control over all measures undertaken for the purpose. Among other matters, he is required (section 20) to direct his attention to the employment of the Divisional Public Works agency to the best advantage. The position of the Deputy Commissioner is not defined as in the other Codes and at the

References to the Report of the Famine Commission, 1898.

beginning of this chapter. The section (21) prescribing his duties is merely a reproduction of section 19 of the Provisional Code. To ascertain his position, as well as that of the officers of the Public Works Department who are not referred to in Chapter III, reference must be made to Chapter VI which treats of relief works. Section 44 in Chapter VI provides that when it is decided that relief works under the direct control of the Public Works Department are to be opened, the Chief Engineer in communication with the Commissioner shall re-distribute works, funds and establishments accordingly, and section 47 makes him responsible for providing tools and other requisites. Section 50 provides that a European or Native official shall be placed in charge of every separate relief work by the Deputy Commissioner who decides with reference to the size and character of the work and the strength of the staff, professional or other, at his disposal whether the officer in charge shall be an official of the Revenue or of the Public Works Department. In either case he will ordinarily be subordinate to the Deputy Commissioner alone in the conduct of the duties prescribed; these duties include the provision of tools and shelter, the classification and treatment of labourers, the adjustment of rates, the payment of wages and the other ordinary relief arrangements. If from the magnitude or character of the relief work it is considered expedient to relieve the Deputy Commissioner of responsibility and control, the Local Government will issue special instructions for the guidance of the official in charge, but even then the Deputy Commissioner will be furnished with immediate copies of the periodical reports submitted by the officer in charge. The provisions of the Code are brief, but the general scheme seems to be that, save in very exceptional circumstances when special orders will be passed by Government, the responsibility for and control of relief works will rest with the Deputy Commissioner, subject to the general control of the Commissioner.

Burma Code.—The general position and responsibility of the Deputy Commissioner is defined in the usual terms (section 41), and the administrative control of the Commissioner over all famine relief measures is declared (section 30). It is the duty of the Commissioner to see that the Divisional Public Works agency is employed to the best advantage (section 31), and as soon as the preliminary reports of impending scarcity are received, he is required, in conjunction with the Superintending Engineer, to prepare a statement showing works in or near the affected areas entered in the programme, and to submit it to the Chief Engineer with their joint recommendations as to what works should be undertaken. The Commissioner and Superintending Engineer are also required to submit jointly to the Chief Engineer a rough estimate of the funds required. On receipt of the joint report, the Chief Engineer has to arrange for the redistribution of works, funds and establishments accordingly (section 36); he is also responsible for submitting emergent budgets, and for providing tools, etc. (sections 37 and 38). Section 39 requires that the Chief Engineer shall immediately inform the Commissioner of the amount of money sanctioned for each relief work, and the Commissioner has then power to open any of the sanctioned works as necessity arises. In the relief works chapter (Chapter VI) it is stated in section 71 that the supervision over all works, whether small or large, should, as far as possible, be professional. Section 76 provides that an officer of the Public Works Department shall, if possible, be placed in charge of such work by the Superintending Engineer, such officer, except in matters of a purely professional technical nature, being subject to the control of the Deputy Commissioner. The duties of the officer in charge are defined in section 77; they include the provision of tools and shelter, the classification and treatment of relief workers, the adjustment of rates, the payment of wages, and the other ordinary relief arrangements. His weekly reports (section 93) are forwarded both to the Deputy Commissioner and to the Superintending Engineer.

Corrections and Additions to Programmes of Relief Works.—Sections 49 and 50 of the Madras Code relate to corrections and additions to be made to the programmes of relief

works during the course of a famine. The corresponding sections in other Codes are as noted in the margin. There is no reference to the subject under this chapter in the Bengal and Bombay Codes.

North-Western Provinces . Sections 33 and 34.
Punjab . . . . . „ 59 to 61.
Central Provinces . . Section 17.
Burma . . . . . „ 35.

In addition to the matters already dealt with, some of the Codes deal with the following subjects in this chapter:—

(1) Special Assistants for Collectors.
(2) Increase of District Revenue Staff.
(3) Increase of Accounts Establishment.
(4) Increase of Medical, Jail and Police Staff.

It is not necessary to go into these here.

All the Codes either in this or in another chapter contain provisions against interference with private trade.

The question of controlling rates for the conveyance of grain by railway is referred to in identical terms in section 41 of the Bombay and North-Western Provinces Codes and section 23 of the Central Provinces Code, but it is not mentioned in the other Codes. Section 40 of the Bombay Code relates to the checking of abuses in the Railway Department: there is no corresponding section in the other Codes.

Section 36 of the Madras Code asserts the necessity of tendering relief, when needed, as promptly as possible.

Section 22 of the Central Provinces Code and section 40 of the Burma Code provide for the Director of Agriculture making local inquiries in affected tracts.

Adverting to the remarks about the Boards of Revenue under Chapter I, it may be repeated that in Bengal and the North-Western Provinces the Board is throughout ignored. In the Punjab, the Financial Commissioner conducts preliminary work and is consulted on matters of principle, but does not control famine operations. In Burma, the Financial Commissioner is throughout given a prominent position in the administration of famine relief. The position of the Chief Revenue authority thus varies greatly in the different provinces.

CHAPTER IV.

CIRCLE ORGANIZATION AND DUTIES OF CIRCLE OFFICERS.

The subjects of this chapter are given in the appendix to the Resolution of 24th August 1893, and the following are the sections in the Provisional Code under each head:—

	Sections.
(*a*) Division of districts	6
(*b*) Inspection and village agency and reports.	1, 2, 3, 4, 7, 8, 9, 10, 11, 16
(*c*) Grain contractors	12, 13, 14, and 15
(*d*) Starving wanderers	17
(*e*) Emigrants	*Nil.*

All the Codes provide for the division of districts into relief circles, either in this or some other chapter.

The Bengal Code (section 30) provides that each affected district should be divided into relief circles, the boundaries of *one or more of which* shall be conterminous, as far as possible, with administrative territorial divisions, such as subdivisions or thannas.

According to the Madras Code (section 75), when, presumably at a later stage of the famine, village relief is started, the taluks are to be divided into relief circles regulated with reference to area and population, so as to admit of every village being visited at least once a week by the inspector.

The Bombay Code (section 44) provides for each taluka being divided into relief circles, the existing charges of Permanent Circle Inspectors being split up for the purpose. For

References to the Report of the Famine Commission, 1898.

slight distress there should be two or three circles to a taluka; when distress is acute, the circle should be of such a size as to allow the Circle Inspector to visit every village once a week.

According to the North-Western Provinces Code (section 43), the administrative territorial divisions with which relief circles are to be conterminous are tahsils, parganas, thannas, kanungos' circles, and the like. Ordinarily the circle, of each supervisor kanungo will be a relief circle, the kanungo being the circle officer.

In the Punjab Code (section 15) each tahsil is divided into relief circles, corrresponding, as far as possible, with some existing administrative unit, such as the zail: no circle, as a rule, comprising a population of more than 12,000 to 15,000 souls. And in acute famine these may be subdivided.

In the Central Provinces Code [section 1 (*a*)] the circle of the Revenue Inspector is the relief circle: but these may, if necessary, be subdivided.

In Burma (section 55) the district or the affected tract is divided into "local areas" and "circles." The "local area" ordinarily consists of a village or villages under the charge of a headman; the "circle" is ordinarily the township under the Township Officer.

All the Codes provide for the appointment of Circle Inspectors, either from the existing revenue staff or by the appointment of special men, and for the utilization of such village agency as exists. The rules regarding the duties of these officers are generally given in great detail, and vary in details.

Grain Contractors.—All the Codes, except the Burma Code, provide either in this or another chapter for the appointment, *when necessary*, of grain contractors to furnish supplies for village relief.

Starving Wanderers.—Each Code provides for relieving and passing on starving wanderers.

Migrants.—The Codes all provide that there should be no interference with migrants, except—

(*i*) when they are obviously too weak to bear the journey;

(*ii*) when it is known that the place to which they propose to go is unable to support them;

(*iii*) when they are wandering aimlessly;

and they provide for the construction of rest-houses on routes of migration.

The Burma Code omits exception (*iii*), and has no provision for rest-houses on routes.

Several of the Codes deal in this chapter with matters which do not properly come under the head of circle organization, particularly with the administrative chain between the District Officer and the Circle Inspector.

CHAPTER V.

GRATUITOUS RELIEF.

Chapter VI. Paragraphs 468—478.

The classes eligible for such relief.—According to the Provisional Code, persons having no relatives able and bound by the custom of the country to support them are eligible for this relief if they come within any of the following classes:—

(*a*) idiots and lunatics;

(*b*) cripples;

(*c*) blind persons;

(*d*) all who from age or physical weakness are incapable of earning their living;

(*e*) all persons whose attendance on the sick or on infant children at home is absolutely necessary.

The persons referred to in the various Codes are in general effect practically those named above, though there are differences in the definition of some importance.

In the Codes of Bengal, the North-Western Provinces, the Central Provinces, and Burma, the definition of the Provisional Code is reproduced *verbatim*. The Madras Code regards as eligible for admission to the lists persons of the classes named who "have no well-to-do friends or relatives on the spot on whom their support would ordinarily and rightly devolve" and includes destitute pregnant women. In the Punjab Code the classes specified in the Provisional Code are eligible, provided they have no relatives "legally bound to support them and able to do so," and the Code also allows other persons to be put on the list by the officer in charge of the relief of the subdivision or tahsil. In the Bombay Code the *proviso* as to relatives is "able and willing to support them"; and in the details of persons eligible instead of "all who from age or physical weakness are incapable of earning their living" two heads are given—(1) "the aged and infirm" and (2) "pregnant women, young children whose relatives will not or cannot support them, and the like." The Collector may also put on the list village servants required for the performance of village duties. It is also provided that if any person ineligible for a gratuitous dole refuses to go to a relief work, he is to get a ticket of admission to a poor-house.

The stage at which gratuitous relief should be given.—The Bengal Code (section 41) contemplates, as a general rule, the commencement of gratuitous relief as soon as relief works have been opened and are found to attract labourers, but it is recognised that there may be cases in which it should be started at once (that is before relief works are required) at the discretion of the officers on the spot without waiting for the completion of the register. The policy of the Madras Code is to begin with relief at kitchens, gratuitous relief being only resorted to later on with the special sanction of Government. The Bombay and Punjab Codes do not expressly say when the system is to be introduced, but it seems to be intended that it should come into operation at an early stage of the distress. The North-Western Provinces Code (section 57) and the Burma Code (sections 67 and 68) leave it to the $\frac{\text{Collector}}{\text{Deputy Commissioner}}$, and the Central Provinces Code (section 35) leaves it to the Commissioner to decide.

Chapter VI. Paragraph 472.

Grain or Money Dole.—The rules as to the adoption of grain or money in gratuitous relief are, in the North-Western Provinces (section 56), Central Provinces (section 37), and Burma (section 68), the same as the rules of the Provisional Code (section 5) which leave it to the option of the Collector, only saying that if food is not easily purchasable, relief should be given in grain; Madras (section 84) does not allow money except under Government sanction; Bombay (section 54) apparently does not allow money at all: Bengal (section 43) and the Punjab (section 94) allow money only in the exceptional circumstances mentioned.

Chapter VI. Paragraph 474.

Amount of Money Dole.—The rule everywhere, except in Bombay, is that of the Provisional Code, namely, that the amount should suffice to buy the minimum ration.

Ibid.

Amount of Grain Dole.—The Madras Code (sections 83, 122 and 124) prescribes the special poor-house rations, one ration for all adults irrespective of sex and children above 12, and another for children below 12. Bombay [sections 54 (*a*) and 107] prescribes the poor-house rations which are the minimum rations and vary according to the sex of adults and the age of children. The North-Western Provinces Code (section 56), the Punjab Code (section 88), the Central Provinces Code (section 37), and the Burma Code (section 68), all prescribe the minimum ration. The Bengal Code (section 44) fixes a weekly grant of 7 lbs. unground grain for adults and 3½ lbs. for children.

Ibid.

References to the Report of the Famine Commission, 1898.

Some of the Codes have a number of subsidiary provisions which need not be referred to here.

CHAPTER VI.

FAMINE RELIEF WORKS.

Chapter VI. Paragraphs 406—428.

Definition of "Ordinary" and "Relief" Works.—Bengal (section 52) opens with the definition of ordinary and relief works, declares that this chapter applies only to the latter, and that no relief works are to be done by contract. Sections 56 and 57 show how ordinary works may be converted into relief works, either wholly or partially. Madras has no corresponding sections, which are however to be found in other Codes as noted in the margin. In all these Codes special care is taken to distinguish ordinary from relief works, but more for the purpose of declaring the former outside the Code than anything else, except in the Punjab, where it is clearly contemplated that ordinary works shall be relied on in the earlier stages of distress, and that the development into relief works shall be gradual. Bengal expressly directs that the term piece-work is to be avoided in connection with relief works.

Bombay	Sections 62 to 64.
North-Western Provinces	„ 59 to 62 and 68.
Punjab	„ 106 to 113 and 21 to 23.
Central Provinces	„ 39, 40, 44, 45.
Burma	Section 72.

Chapter VI. Paragraph 407.
Chapter IV. „ 174.

Large and Small Relief Works.—Section 53, Bengal Code, next defines "*large*" and "*small*" relief works, the former being those calculated to provide simultaneous employment for three months to at least 1,000 persons. The supervision in each case is to be, as far as possible, professional. Large works are to be regarded as the backbone of the relief system in the later stages of famine, while small works should be utilized to the utmost in the early days of scarcity. The Madras Code, section 59, distinguishes between "large" and "small" works, and in all other Codes the Bengal definition of large works, and the rest of section 53 as quoted above, are followed, the corresponding sections being as in the margin, except that Bombay makes no pronouncement regarding large works being the backbone at the later stages.

Bombay	Sections 65 to 67.
North-Western Provinces	„ 63 to 65.
Punjab	„ 25, 26 (Chapter I). Section 106 (Chapter VI).
Central Provinces	Sections 41, 48, 50.
Burma	„ 69, 71.

Section 54, Bengal Code, distinguishes again between works carried out by the Public Works Department and those carried out by the District Officer or District Board. This is in the Bengal Code alone.

Chapter VI. Paragraph 408.

Selection of Works.—The sections relating to selection of works in the different Codes are as follow:—

Bengal	Section 55.
Bombay	Sections 66, 68.
North-Western Provinces	„ 75, 76.
Punjab	„ 27, *et seq.* „ 114.

In the Madras, Central Provinces and Burma Codes there are no specific rules on the subject. The Bengal Code gives a distinct preference to tanks as relief works and requires that the works should be sufficiently numerous to supply labour tolerably near to the homes of those who require it, approximately one work in each 16 square miles. The Punjab Code says that large works will not be started in every tahsil or locality; the able-bodied population must be prepared to leave their houses in order to obtain employment on such works. The North-Western Provinces and Bombay Codes give no indication as to the number and character of works that should be opened.

Chapter VI. Paragraph 426.

Officer in charge of Works.—The provisions relating to this subject have been dealt with under Chapter III.

References to the Report of the Famine Commission, 1898.

Admission of Applicants to Relief Works.—The rules governing the admission of applicants to relief works are as under :—

Bengal	Sections	60, 61.
Madras	„	93, 105.
Bombay	„	69, 91, 92.
North-Western Provinces ...	„	78, 79, 80.
Punjab	„	125, 126.
Central Provinces	„	53, 54.
Burma	„	78, 79.

These are all in effect practically indentical. They provide that at every work a place shall be fixed for the admission of applicants, and for their being relieved before commencing work.

Chapter VI. Paragraphs 439—445 and 450.

Classification of Workers.—The classification of relief workers in all provinces is the same. It is based on the suggestions of the Famine Commission and follows the definition subsequently prescribed by the Government of India.

The Code sections are—

Bengal	Sections	62, 63.
Madras	„	96, 97.
Bombay	„	70, 75.
North-Western Provinces ...	„	66, 67, 69, 74.
Punjab	„	115, 116.
Central Provinces	Section	52.
Burma	„	75.

There are however differences in details as regards children, nursing mothers, etc.

Chapter VI. Paragraph 462.

Tasks.—Sections 64, 65, 66, Bengal Code, relate to the tasks for different classes. The corresponding sections in other Codes are—

Madras	Sections	100, 107.
Bombay	„	77, 78, 79, 80.
North-Western Provinces ...	„	70, 71, 72.
Punjab	„	119, 128, 129, 134.
Central Provinces ...	„	57, 58.
Burma	„	89, 90.

The A task is based upon the task ordinarily performed by professional labourers. The Codes for Bengal, the North-Western Provinces and Punjab follow the Resolution of 24th August 1893 in making the B and C tasks 90 or 85 and 75 per cent. of the A task respectively, or closely in proportion to the wages. All other Codes, while keeping to the same wage scale, make the B and C tasks 75 and 50 per cent., respectively, of the A task.

Section 107, Madras, renders the sanction of the Collector necessary before Engineers can modify tasks, while in Burma (section 89) the Deputy Commissioner practically controls the task. In Bombay and the Punjab, the Chief or Superintending Engineers are the officers responsible for the maintenance of an equal standard of tasks. This appears to refer to the general standard to be worked up to, not to the actual tasks to be imposed. In other provinces there is no clear rule on the subject.

Chapter VI. Paragraphs 456—457.

Payment of wages.—The Bengal rules as to payment of wages are in sections 67, 68, 69, 70.

The corresponding rules in other Codes are as follow :—

Madras	Sections	101, 102, 103, 104, 105, 106, Appendix VI, paragraph 28.
Bombay	„	82, 83, 84, 85.

References to the Report of the Famine Commission, 1898.

North-Western Provinces ...	Sections	87, 88, 89, 90, 91, 92.
Punjab	„	135, 136, 137.
Central Provinces... ...	„	60, 61, 63.
Burma	„	100—105.

The Code sections are generally on the same lines, the general principle being that less than the D or so-called minimum wage is never to be paid, except in cases of contumacy, though when an A, B, or C task is not performed a proportionate reduction in the payment may be made.

The other sections in this chapter have either been dealt with under Chapter III or refer to matters too trivial to be worth comparing.

CHAPTER VII.

WAGES AND RATIONS.

Chapter VI. Paragraphs 452—457.

The Provisional Code, Chapter X, prescribes the full ration "sufficient to maintain able-bodied labourers in health and rength" and the minimum ration "for labourers," thus:—

	Full.		*Minimum.*	
	Man.	Woman.	Man.	Woman.
	lb. oz.	lb. oz.	lb. oz.	lb. oz.
Flour of the common grain of the country or cleaned rice.	1 8	1 4	1 0	0 14
Pulse . . .	0 4	0 2	0 2	0 4⅓
Salt	0 0½	0 0½	0 0½	0 0
Ghi or oil . . .	0 1	0 0½	0 0½	0 0½
Condiments and vegetables.	0 1	0 1	0 0½	0 0½

The full ration "for children" is said to be ¾, ½ and ¼ full rations, according to age and requirements. The minimum ration "for children, not being infants, below 14," is the same proportion of the minimum rations.

The penal ration for labourers sent to a poor-house for refusing to work is prescribed thus:—

	Man.	Woman.
	oz.	oz.
Flour, grain or rice . . .	14	12
Pulse	1	1
Salt	½	½

The "minimum wage" and the "full wage" are defined as the amount of money which at the current rates is sufficient to purchase a "minimum ration" and a "full ration" respectively.

Chapter VI. Paragraphs 435—436.

In Chapter VI of our report an account is given of the "grain-equivalent" system of calculating wages introduced by the Government of India Resolution of 24th August 1893 and of the wage scale then laid down. The wage scale then introduced was recommended for general use, a discretion being however left to Local Governments to order the actual cost of the component items to be used in the calculations if the grain-equivalent method appeared to give very divergent results. It was laid down that the grain selected as a basis for calculation should in every case be the "staple or staples in ordinary consumption in the affected tracts." The wages deduced in terms of he grain-equivalent are thus stated. (In some cases the female

wage stated differs to some extent from the true arithmetical deduction).

Adult Males—

Maximum.	Class A	The money value of $2\frac{5}{8}$ lbs. or 21 chattaks of grain.								
	Class B	„	„	„	„	$2\frac{3}{8}$	„	„ 19	„	„	„
	Class C	„	„	„	„	2	„	„ 16	„	„	„
	Class D	„	„	„	„	$1\frac{3}{4}$	„	„ 14	„	„	„
Minimum .	All classes	„	„	„	„	$1\frac{3}{4}$	„	„ 14	„	„	„

Adult Females—

Maximum.	Class A	The money value of $2\frac{3}{8}$ lbs. or 19 chattaks of grain.								
	Class B	„	„	„	„	$2\frac{1}{4}$	„	„ 17	„	„	„
	Class C	„	„	„	„	$1\frac{1}{8}$	„	„ 15	„	„	„
	Class D	„	„	„	„	*$1\frac{7}{16}$	„	„ 13	„	„	„
Minimum .	All classes	„	„	„	„	*$1\frac{7}{16}$	„	„ 13	„	„	„

The wages and rations of the Codes are based upon and very closely adhere to those of the Provisional Code, amplified by the provisions of the Resolution of 24th August 1893. Madras gives the B female 18 instead of 17 chattaks, the former being the correct equivalent of $2\frac{1}{4}$ lbs., but $2\frac{1}{4}$ lbs. was a mistake in the Resolution. Such slight variations as exist in the different Codes are now noticed.

Bengal Code, Chapter VII.—This Code prescribes the "full ration," the "minimum ration," the "penal ration," the "minimum wage," and the "full wage," exactly as in the Provisional Code with only one difference, *viz.*, that the rations for children range from one-half to one-quarter of a man's ration instead of from three-quarters to one-quarter.

The ordinary method of calculating the wage is the "grain-equivalent" method, the instructions given being almost *verbatim* those contained in the Resolution of 24th August 1893 with the one exception already noted, *viz.*, that children cannot get more than half the adult male's wage. The District Officer is to apply to the Commissioner to revise the wage whenever there is a change in the market sufficient to involve an increase or decrease of two chattaks in the grain-equivalent.

In cases where the price of grain does not fluctuate with sufficient regularity in proportion to the prices of the other items of the ration, the District Officer may, with the Commissioner's sanction, calculate the wage according to the money values of the several items (the Provisional Code method). A ready method of doing this, based on the experience of the scarcity of 1891-92, is given (section 103). Section 103 is very important, as it lays down the rule that wages are not to be fixed in pies, and are not to follow fluctuations in the market which involve a difference of less than one pice.

As a rule, payments are to be made in cash. But in exceptional cases of severe famine, as when the items cannot be bought and when the only grain procurable is that imported by Government, the whole or part may be paid in kind. Importation is never to be resorted to except under exceptional circumstances.

Madras Code, Chapter VIII.—The Madras Code begins by saying that the wages payable should be adjusted from time to time by the officer in charge of the work with reference to the notices of prices received from the Revenue Officers and in accordance with the prescribed scale. It seems clear that by "Revenue Officers" tahsildars are meant. This provision is peculiar to Madras and in a modified degree to Bombay and the Punjab. The prescribed scale is the grain-equivalent scale for men, women and children of the Resolution of 24th August 1893, with the difference in the B female wage already noted. For the purpose of calculating the wage, grain is defined as meaning "grain of medium quality and of the description in ordinary use at the time of payment."

* Should be $1\frac{1}{8}$ lb. subsequently corrected.

References to the Report of the Famine Commission, 1898.

Provision is made for calculating the wage on the money value of each item of the ration when the actual cost of the items varies considerably from the money value of the grain-equivalent.

No penal ration is prescribed.

There are the following special provisions:—

(1) The minimum wage of a nursing mother shall be equal to the value of 2 lbs. of grain.

(2) All persons above 12 are to be treated as adults.

(3) No children under 7 are to work.

The following special ration is prescribed for adults in kitchens and poor-houses:—

Raw grain	20 oz.
Pulse	2 „
Salt	12 drachms.
Tamarind	8 „
Chillies	8 „

This ration was reduced during the late famine under the orders of the Government of India.

The gratuitous relief moneydole is the money value of the minimum ration.

There are also special rules for those under medical treatment and for young children which do not require discussion.

Bombay Code, Chapter VII.—This Code prescribes the rations for adults as in the Provisional Code with two variations, *viz.*, that the term "flour" is substituted for "flour of the common grain used in the country, or common rice," and that in the maximum ration for females the amount of ghi or oil is one [illegible]ce instead of half an ounce (this may be a misprint), and it [illegible]roduces the grain-equivalent wages as in the Resolution of 24th August 1893. It is stated that the grain to be selected as the basis of calculation shall be jowari or bajri, according to the local practice of consumption; or the cheaper of the two if both are equally staple food-grains.

The standard rations for children are fixed as follows:—

	Working children, 7 to 12.		Non-working children under 7.
	Maximum.	Minimum.	
	oz.	oz.	oz.
Flour	18	12	6
Dal	3	2	1
Salt	½	½	½
Ghi	½	½	½
Condiments and vegetables ...	½	½	½

Provision is made as elsewhere for calculating the wage according to the money value of the items of the ration when the variation is great.

The gratuitous relief dole and the poor-house ration are defined as the minimum rations.

The Sanitary Commissioner is made responsible for providing suitable diet scales in hospitals, the maximum rations being taken as a guide.

No penal ration is prescribed. As a rule, wages are to be paid in cash (with the same exceptional proviso as in Bengal) adjusted from time to time by the officer in charge of the work with reference to prices of food-grain in the bazar to which the workers resort.

If fuel is difficult to obtain, the Collector may issue it *gratis*, and he may also provide grindstones and cooking utensils.

References to the Report of the Famine Commission, 1898.

Section 118 contains a provision peculiar to Bombay. It lays down that on small works the wages shall be regulated by the Collector, who will take into consideration the character of the work and the purpose for which it is intended.

Compare however with section 134, Provisional Code, where the same discretion is given, subject to maximum and minimum limits.

North-Western Provinces Code, Chapter VII.—The North-Western Provinces Code prescribes the full and minimum rations for adults and for children and the penal ration for contumacious workers exactly as in the Provisional Code, and the grain-equivalent system as in the Resolution of August 1893.

It has the usual provision for calculating the wage according to the money value of the items of the ration in exceptional cases and for payment being made in cash.

There are no miscellaneous provisions.

Central Provinces Code, Chapter VII.—The provisions are those of the Provisional Code and the Resolution of 24th August 1893, and are practically the same as those in the North-Western Provinces Code, though expressed more briefly and with the exception that this Code omits to say when wages are to be paid in cash and when in kind. The wages are governed by the current local price of the grain which is the staple of ordinary consumption in the tract affected.

The only miscellaneous provision is that wages will be altered on the occurrence of any change in prices recorded in the wages table. It is not stated who is to order the alteration.

Punjab Code, Chapter VII.—The full and minimum rations for adults and the penal ration are those of the Provisional Code with the exception that the term "flour" is substituted for "flour of the common grain used in the country, or common rice." It is explained that the flour should be that of the coarsest cereal or millet ordinarily consumed and commonly purchased in the bazar.

For working children between 7 and 12 the full and minimum rations are those of the Bombay Code with one difference, *viz.*, that in the full ration the amount of ghi or oil is $\frac{3}{8}$ oz. instead of $\frac{1}{4}$ oz. For non-working children the ration is to be determined according to age and requirements, usually one-fourth of the man's ration for children below 7; milk, etc., may be given to children under 3.

The Inspector-General of Civil Hospitals is made responsible for fixing hospital rations.

The gratuitous relief dole and the poor-house rations are the minimum rations.

The method of payment is that of the Provisional Code, the grain-equivalent method being only given as an alternative. This alternative method may be adopted "so long as experience shows that the money value of the part of the ration which consists of grain, enhanced by 75 per cent., is a fair equivalent of the money value of all the items included in the ration."

The Deputy Commissioner may in certain cases provide fuel and grindstones *gratis*.

Wages are to be paid in cash with the usual exceptional proviso as in Bengal and elsewhere.

The Deputy Commissioner is responsible for seeing that scales of wages are promptly adjusted by the officer in charge when prices vary.

Section 178 contains a proviso peculiar to the Punjab. It requires the Deputy Commissioner, if he considers the rate of wages paid on relief works too low, to report the matter to the Commissioner, who in turn will forward the report to Government. In urgent cases the Deputy Commissioner may increase the rate.

References to the Report of the Famine Commission, 1898.

Burma Code, Chapter VII.—In this Code the full and minimum rations differ from those of the Provisional Code and the other Provincial Codes, presumably because pulses are not ordinarily eaten by the people of Burma. Rations, adapted to the circumstances of the country, are prescribed.

The provisions regarding children (under 14) are exactly those of the Provisional Code.

There is no penal ration.

Payments are to be made according to the grain-equivalent method, the grain chosen for calculating the ration being rice; with the proviso that when the assumption that the price of grain fluctuates in proportion to the price of the other items does not hold good, the minimum wage may be taken to be the amount of money that would purchase the various items. And they are to be in cash with the usual exceptional proviso.

The Deputy Commissioner adjusts the wages as prices vary.

This Code contains a number of miscellaneous provisions which may be named without description in detail:—

(1) The wages of the different classes (A, B, C, D) are to admit of certain margins.

(2) Time of payment.

(3) Fines.

(4) Rest days.

(5) A scale is laid down for dependants; the scale represents less than half the minimum ration, but it is explained that as the food is eaten in common by the whole family, this economy is permissible.

(6) Mode of payment to individuals, families and gangs.

CHAPTER VIII.

POOR-HOUSE.

Chapter VI. Paragraph 478.

In paragraph 25 of the Government of India Resolution of the 9th June 1883 it was stated that it was unnecessary to discuss the rules contained in the Provisional Code for the management of a poor-house. The Code itself was considered to be sufficiently explicit. Reference was, however, made to the proposal that able-bodied labourers who refused to work should be made liable to punishment under the criminal law, and that legal power should be taken to retain weakly persons in poor-houses until the scarcity is over. The Government of India was not convinced of the necessity of legislation, but desired that the question should receive very careful consideration in future famines.

The Provisional Code, Chapter V, defines the poor-house as an enclosure within which cooked food is distributed gratuitously to inmates. No persons can be admitted except—

(1) persons unfit to work who cannot conveniently be sent to their homes;

(2) persons fit to work who refuse to labour.

Residence in the poor-house is compulsory in the case of persons of the first class until they are fit to work or to be sent home, and, in the case of persons of the second class, until they consent to work. There is ordinarily to be one poor-house for each subdivision of a district, but the District Authority determines the number with the sanction of the Commissioner. Provision is made for the appointment of visitors to inspect and supervise the administration of the poor-house, and instructions are given as to how the site is to be selected. It is distinctly ruled that a hospital under a medical officer is to be attached to each poor-house. Finally, instructions are given as to how a

poor-house should be closed. Appended to the Provisional Code is an extract from Mr. Elliott's draft code containing detailed rules for the administration of poor-houses. These rules are to serve as examples.

Bengal Code.—The Bengal Code differs from the Provisional Code and the other Provincial Codes by ruling that poor-houses are only required when famine is severe and the remedies of relief works and gratuitous relief at or near the homes of the people are insufficient. When famine is severe, however, there should be one poor-house for each *relief circle*, and to meet this case a set of special rules is provided in an appendix: these rules are practically Mr. Elliott's rules. No poor-house can be constructed or opened without the sanction of the Commissioner.

In other respects the Bengal Code follows pretty closely the Provisional Code. The following divergencies are noticed:—

(1) Two new classes of inmates are given, namely, (*a*) professional beggars who find the sources of private charity dried up, and (*b*) other applicants for relief of whom it is doubted if they are really in want, and to whose case willingness to reside in a poor-house is applied as a test.

(2) Certain details are given as to muster rolls and returns and as to the general plan and management of the poor-house.

(3) Provision is made for the paupers themselves doing a certain amount of menial work connected with the establishment.

The ration prescribed is the minimum ration except in the case of contumacious labourers who receive the penal ration.

Madras Code.—In Madras in the early stages of distress, relief for all who cannot earn wages on relief works is restricted to the grant of cooked food at central kitchens. Poor-houses, it is stated, are intended for the housing and maintenance of destitute wanderers unfit for employment on works, and who have no homes or have cut themselves adrift from their homes and *who cannot be satisfactorily looked after in kitchens:* also for contumacious labourers.

The Madras Code does not follow closely the provisions of the Provisional Code. The following are the subjects for which provision is made:—

(1) Raiment may be given to the inmates.

(2) Selection of site.

(3) Limitation of the number of inmates to 1,200 persons.

(4) Attachment of a Medical Officer's hospital.

(5) Scale of establishment and their duties (see Appendix V).

(6) Instructions as to the supply and distribution of food.

(7) Special rations are prescribed (sections 122 to 125). The grain rations prescribed are common to men, women and children above 12 years of age.

Bombay Code.—This Code also does not follow the Provisional Code very closely. Here the poor-house is for "destitute persons who have no homes or have abandoned their homes and become wanderers, and persons who are unfit for employment on works." It is there laid down that poor-houses will receive all classes of applicants who will afterwards be either drafted to relief works, sent to hospital, transferred to their homes, or retained as ordinary inmates. These latter will comprise wanderers and professional beggars who refuse to work or are incapable of work. The poor-house may be used also as a rest-house for those on the way to a relief work.

References to the Report of the Famine Commission, 1898.

It is provided that there shall be one central poor-house for each taluka with as many branch poor-houses as may be requisite, and that there shall be poor-houses whenever required in connection with large works.

The only other provisions are—

(1) For the attachment of hospitals.

(2) As to strength of establishment and their duties (see Appendix VI).

(3) For the exaction of work from the inmates.

The rations are the minimum rations.

North-Western Provinces Code and Central Provinces Code.—The provisions of these two Codes are almost *verbatim* the same as those of the Provisional Code. Such slight differences as exist do not call for special notice. Each contains an appendix of rules.

In each case the rations (see the appendix) are the minimum rations except in the case of contumacious labourers who receive the penal ration.

The Punjab Code.—This Code follows the Provisional Code with the following differences:—

(1) There are four classes of persons eligible for admission, as in Bengal.

(2) The poor-houses may be used as rest-houses for those on their way to a relief work, as in Bombay.

(3) A new hospital attached to the poor-house need not necessarily be constructed. An adjacent existing hospital or dispensary may be used.

(4) Special arrangements may be made for children.

(5) Some rules as to returns and registers are given.

(6) In towns poor-houses of the nature of soup kitchens may be opened.

The rations are the minimum rations, except in the case of contumacious labourers who receive the penal ration.

The *Burma* Code makes no provision for poor-houses.

CHAPTER IX.

KITCHENS FOR CHILDREN.

Chapter VI. Paragraphs 475—476.

The heading of the chapter prescribed by the Government of India is not very appropriate. It should be "Kitchens" and not "Kitchens for Children."

The system for the relief of children and dependants favoured by the Famine Commission, and adopted in the provisions of the Provisional Code, was one of separate relief by distribution of grain or cooked food in kitchens. The provisions of the Provisional Code regarding these kitchens are to be found in sections 4 (*e*), 19 (*e*) and 61 of the Code. Briefly stated, they provide that labourers' children unfit to work shall be fed in kitchens, while infirm persons unfit to work shall receive the minimum wage, and if dependent on labourers be kept on the work or if not so dependent be drafted to a poor-house. From paragraph 9 of the Government of India Resolution of 17th March 1892 it will be seen that the Provisional Code did not allow the expansion of money wages for the purpose of providing a margin from which relief might be given to children and infirm dependants by their able-bodied relatives on relief works. This was considered dangerous on the ground that experience had shown that starving parents cannot in times of severe famine safely be entrusted with the feeding of their children. In 1892 the

Government of India were not disposed to admit any modification of the principle confining the wage to workers and restricting its amount to a liberal money-equivalent of the worker's subsistence ration, and they expressed the opinion that the recent experience in Madras had tended to confirm the view that the system of famine kitchens and poor-houses, for the support of the young and infirm, was sound. The Government of India decided that, in the event of serious famine, this system should not be abandoned, although they were not prepared to insist absolutely on its adoption, especially in the earlier stages of distress in those provinces where the proper relief of dependants, by their guardians, could be guaranteed. Permission was accordingly given to local Governments to apply for the modification or withdrawal of the original prohibition of relieving children and others through their parents and guardians. After the scarcity following on the failure of harvests in 1891-92, more than one local Government represented that relief to children and dependants could be more conveniently afforded by means of allowances to the working members of the family than by distribution of food in kitchens. The Government of India in their Resolution of 24th August 1893 (paragraph 15) adhered to the view that such relief should preferably be given under the system favoured by the Famine Commission and the old Codes, but at the same time they left it to local Governments to adopt the other system whenever they were satisfied that it would combine efficiency of relief with the minimum of expenditure.

The following examination of the provisions of the various Codes, under the head of kitchens, will show to what extent advantage has been taken of the discretion thus given to local Governments :—

In the *Bengal* Code, sections 119 to 140 deal with kitchens. But to understand the system, reference should first be made to section 84. In that section it is said that "except in a very severe famine, relief to children unfit to work and adult dependants may be conveniently afforded by means of allowances to the working members of the family, etc." Then in section 120 it is provided that "where it is not considered desirable to grant allowances to relief workers under section 84, for the purpose of relieving their children and adult dependants, a daily supply of cooked food should be issued to them at these kitchens" (in the case of children only those who cannot be *employed* on the works being admitted). "These kitchens" (section 119) are kitchens in the central village of a circle, villages being grouped into circles not more than five miles in diameter, for the purpose of relieving children so as to admit of the children being brought daily to the central village in the morning. Then section 121 provides that children abandoned by their parents should, if old enough, be sent to a suitable relief work, or if too young to work be admitted to the nearest kitchen.

The system contemplated by the Code, therefore, seems to be that at some undefined period of the famine, central kitchens should be opened for feeding the children of a group of villages. All abandoned children unable to work should be sent to these kitchens. Later on, when famine becomes very severe, non-working children and adult dependants of relief workers, who otherwise are relieved by means of cash allowances to the workers, should be admitted to these kitchens.

The ration is determined in section 122; for adult dependants it is the ordinary minimum ration, and for children from one-quarter to one-half the minimum ration according to age. Sections 123 to 140 deal with details of management.

The *Madras* Code system is altogether different. It is there laid down (section 64) that "in the early stages of distress, unless otherwise directed by Government, relief for all who cannot earn wages on relief works and are otherwise unable to support themselves, shall be restricted to the grant of cooked food at central kitchens established for the purpose. Persons relieved at a kitchen will be subjected to no restraint and will be free to come and go." Villages are to be grouped into circles

References to the Report of the Famine Commission, 1898.

five miles in diameter (section 65). Kitchens are also to be provided in connection with large works for the feeding of non-working children and of persons temporarily disqualified from work.

The ration is the special ration defined in sections 122 to 125, and there is an appendix giving details of management.

The *Bombay* Code system is again different. The system there is (sections 124 and 125) that "whenever it is practicable, non-working children, *i.e.*, children under seven years of age, and adult dependants shall be relieved by the distribution of cooked food. On large works, the adult dependants shall be relieved at the poor-houses connected with the works." And in section 127 it is provided that there shall be kitchens for children on large works. The system, therefore, is that kitchens are only opened in connection with works. Non-working children and adult dependants must if possible be fed in kitchens which are managed on the same lines as poor-houses.

The rations prescribed appear to be the minimum rations, and details of management are given. There is a rule that, if difficulty is experienced in giving these children and dependants cooked food, the Collector may sanction the payment of the cash value of the allowances to their able-bodied adult relatives.

The *North-Western Provinces* Code system is not unlike the Bengal system. Section 119 says "experience having shown that starving parents cannot, in time of *severe famine*, safely be entrusted with the means of relieving their children, it is essential that a daily supply of cooked food should be issued to them under proper supervision. Adult dependants of relief workers, who are unfit to work, may also be relieved at kitchens and supplied with cooked food." Then section 120 provides that kitchens, with sleeping sheds attached, should be established at convenient centres whenever it is found that private charity is unable to cope with the emergency, and section 121 provides for abandoned children being sent to a relief work or a kitchen according as they are able to work or not.

According to section 99, infirm dependants of relief workers and children unfit to work shall either be fed at kitchens, or allowances on their account shall be paid to the adult members of the family. As kitchens are not contemplated until the famine is severe, it would seem that the latter course should generally be adopted in the first instance.

The ration prescribed for adult dependants is the *minimum* ration, children getting from one-quarter to three-quarters according to age and requirements. There is an appendix containing detailed rules.

The *Punjab* Code (section 194) provides that when the relief for non-working children by means of cash allowances to the working members of the family, or under the system of gratuitous relief laid down in Chapter V, is considered undesirable or insufficient, a daily supply of cooked food should be prepared and distributed to the children at kitchens. On large relief works, kitchens may be provided for non-working children. And further (section 196), if the Deputy Commissioner considers that other kitchens besides those at relief works are necessary, he shall provide them, grouping the villages into circles.

Abandoned children (section 197) are to be sent to a relief work or a kitchen, according as they can work or not.

An appendix contains detailed rules of management.

The system is a permissive system and is, on the whole, not unlike the Bengal system except that kitchens are contemplated on the large works as well as at centres.

The provisions of the *Central Provinces* Code (sections 96 to 99) are practically the same as those of the North-Western Provinces Code.

The *Burma* Code contains no provision for kitchens.

CHAPTER X.

References to the Report of the Famine Commission, 1898.

OTHER MEASURES OF RELIEF.

The " Other Measures of Relief " contemplated in the Provisional Code, Chapter VI, are (*a*) gratuitous and semi-gratuitous relief to *parda nashin* women, (*b*) relief to respectable men, (*c*) relief to artizans, (*d*) relief to weavers, and (*e*) temporary orphanages.

Parda nashin women, not otherwise eligible for gratuitous relief, are to be given the minimum ration in return for some light work.

Persons of respectable position and family who are reduced to starvation are not to be forced to labour on the works, but are to be employed as gang-overseers, accountants, clerks, etc. If no suitable work is available, they are to be admitted to gratuitous relief.

Artizans are to be employed, as far as possible, in their own trades on the relief works.

Weavers, when numerous, are to be given thread and to be paid for cloth woven, at, or if necessary, above the market price. Chapter VI. Paragraphs 508—511.

Temporary orphanages may, if necessary, be established at the head-quarters of districts to which may be sent, when poor-houses and children's kitchens are closed, children without relations. The orphanages may be placed under the District Board, who may make over the children to any respectable persons (preferably those of the same religious persuasion as the children) who wish to adopt them. If not adopted within three months, the child may, with the Commissioner's sanction, be sent to an orphanage or public institution for destitute children. Provided that in any case a child may be reclaimed by parents or near relations who have a legal right to its custody.

The provisions of the *Bengal* Code (Chapter X) , the *North-Western Provinces* Code (Chapter X) and *Central Provinces* Code (Chapter X) are the same as those of the Provisional Code. In the Bengal Code the provisions regarding *parda nashin* women are given in the gratuitous relief chapter, sections 43-B, 45, and 46.

In the *Madras* Code (sections 126 to 138) the "Other measures" are (*a*) Land Improvement loans, (*b*) Agriculturists' loans for purchase of fodder, cattle and seed, (*c*) Advances to weavers, (*d*) Relief to artizans, (*e*) Relief to *gosha* (*parda nashin*) women, (*f*) Relief to respectable men.

Great stress is laid on the desirability of granting loans for land improvement, and Collectors are instructed to invite applications for such loans. "Experience has shown that one of the most beneficial methods of affording relief, and one of the best systems of providing the people with employment near their homes during a season of distress, is to encourage in every possible way the carrying out of land improvements, such as well-sinking, removal of *nuth* grass, etc., by the aid of State loans under Act XIX of 1883."

Loans for seed-grains are to be in cash and not in kind.

Weavers when numerous and in need of relief are to be given employment, in their own craft, by means of advances. The instructions given are more full than in the Provisional Code ; one provision is that incapable dependants and non-working children of weavers are to be fed gratuitously at kitchens. Special rules are contained in Appendix VII.

Artizans are to be given employment in their own trades on the public works.

Parda nashin women are to be given " the gratuitous relief ration " (section 122) in return, if possible, for some suitable work.

References to the Report of the Famine Commission, 1898.

Respectable men are, as in the Provisional Code, to be employed as clerks, etc., or if employment cannot be found for them to be admitted to village relief.

The provisions regarding orphanages will be found in section 90 under the gratuitous relief chapter. They are much the same as those of the Provisional Code, except that there is no rule for making over the children to a public orphanage or similar institution.

In the *Bombay* Code (sections 137 to 154) the "Other measures" are—(*a*) Suspension and remission of land revenue, (*b*) Loans to agriculturists, (*c*) Relief to respectable persons, artizans, etc., (*d*) Temporary improvement of the water-supply, and (*e*) Acceptance and utilization of private subscriptions.

The Collector is given the power to suspend the collection of land revenue, provided he reports his proceedings forthwith. He will then make further enquiry and eventually report to Government his recommendations for the partial or total remission or collection of the suspended land revenue. Detailed instructions are given.

Estimates are to be framed and special allotments of funds made for loans under the Land Improvement Loans Act and the Agriculturists' Loans Act. The Governor in Council will, if necessary, obtain the sanction of the Government of India to abridge the ordinary forms of procedure and to remit stamp duty and interest. Loans for seed-grain are to be in cash and not in kind.

Respectable men are to be dealt with as in the Provisional Code, and so too are artizans.

Parda nashin women are to be given "semi-gratuitous" relief. Lists of proper recipients are to be prepared, the recipients will be given a ticket holding good for one month, and they will be entitled to receive a ration (amount prescribed, *viz.*, 7 lbs. of flour for an adult and 3½ lbs. for each child) weekly from a grain-dealer of the village appointed to supply it. Some suitable work is required in return for the relief given.

When weavers are congregated together in considerable numbers semi-gratuitous relief by employment in their own craft is to be given to such of them as are in need of it. They are given advances of money, and the work turned out is purchased "at a liberal rate." The women and children of the weavers may at discretion be placed on gratuitous relief. When the number of weavers is not great, they may be given semi-gratutious relief as in the case of *parda nashin* women. During the course of the late famine the section of the Bombay Code governing the relief of weavers was amended so as to restrict the special relief to those only who are deemed "incapable of gaining a livelihood on the ordinary relief works."

Allotments are to be placed at the disposal of Collectors for the improvement of the water-supply.

Private subscriptions, when accepted, are to be paid into a general fund for each district and may be allotted by the Collector to his officers for distribution on any charitable measures of relief.

In the *Punjab* Code (sections 199 to 205) there are only two "Other measures," *viz.*, relief to weavers and orphanages. The provisions in both these respects are practically the same as in the Provisional Code. Sections 102 to 104 under the gratuitous relief chapter contain provisions for *parda nashin* women and respectable men corresponding with those of the Provisional Code, and section 117 under the relief works chapter makes the usual provision for artizans.

The *Burma* Code contains no such head, nor are these special provisions to be found in the Code.

CHAPTER XI.

MEASURES FOR THE PROTECTION OF CATTLE.

The Provisional Code (Chapter VII) provides for the preparation and maintenance when necessary of a district register showing the number of cattle depending on pasture, the pasture grounds ordinarily in use and the Government reserve pasture grounds to which in times of drought the cattle can conveniently be driven. Government decides, in concert if necessary with the Forest Department, to what reserve the cattle from each district may be driven in case of need.

When it appears to the District Officer that the pasture of his district is about to fail, he reports through the Commissioner to Government who may open the reserve set apart for such district. The District Officer then informs the people and urges and assists them to send their cattle to the reserve. He has to arrange for fodder and water on the route. The management of pasture reserves and the control of the cattle admitted to them is in the hands of the Forest Officers, and ordinary pasturage fees may be reduced or remitted as Government may direct. There is also a provision that in districts irrigated by canals, the Commissioner shall take measures for the growth of fodder and for increasing the growth of grass by flood.

These provisions are only carried out in such parts of the province as are considered applicable by Government.

The provisions of the Bengal and the North-Western Provinces Codes are almost identically the same as those of the Provisional Code.

Except Bengal and the North-Western Provinces, and to a certain extent the Central Provinces, where a list of the reserves and the routes leading to them is kept, no other province provides for the precautionary measure of maintaining a register of cattle and pasture grounds. The only Codes containing the provision for the production of fodder in canal-irrigated districts are the Bengal, North-Western Provinces, Bombay and Punjab Codes.

In the Madras Code (sections 139 to 142) the measures for the utilization of forests and the protection of cattle are combined in the same chapter. As regards cattle when there is likely to be a serious failure of pasture, the Collector, in communication with the Conservator of Forests, has to report to the Board of Revenue, who will then, in consultation with the Director of Land Records and Agriculture, "take the necessary action." If water is scarce on routes largely used by cattle the Collector, as in other provinces, has to make arrangements. Section 142 gives instructions as to how the prickly pear plant can be used as fodder. This instruction is not to be found in any other Code.

The Bombay Code (sections 155 to 158) provides for the Collector reporting failure of pasture to the Commissioner, who in communication with the Conservator of Forests may open forest areas for free grazing. These areas, when opened, are in the hands of the Forest Officers under the orders of the Collector.

The provisions of the Punjab Code (sections 206 to 214) are in effect practically the same as those of the Provisional Code, except that the precautionary measure of maintaining a register is not prescribed. This Code also contains (section 207) instructions to the Deputy Commissioner to utilize as fully as possible "unclassed State forests," and provides for the Government (section 213) arranging with officers of Native States, etc., for the transit to and reception of cattle in the hills.

In the Central Provinces Code (sections 110 to 116) it is provided that a list of the reserves and the routes leading to them should be prepared by the Deputy Commissioner in consultation with the Circle Conservator of Forests and the Director of Agriculture. The provisions for throwing open these reserves when there is a failure are practically the same as in the Provisional Code.

References to the Report of the Famine Commission, 1898.

The Burma Code has only one section (112) dealing with this subject. The Commissioner on the report of the Deputy Commissioner arranges with the Conservator of Forests for opening reserves, or for making arrangements in neighbouring districts where fodder is plentiful.

CHAPTER XII.

UTILISATION OF FORESTS.

The Provisional Code, while giving expression to the principle that forests should be open for cattle on the occasion of drought, contained no provisions for utilizing the edible forest-produce as human food. This was noticed by the Government of India in paragraph 10 of the Resolution of 19th December 1889, and local Governments were instructed to include in their Codes explicit rules on the subject.

The Codes of Bengal (sections 157 to 160), Bombay (sections 159 to 162) and the Punjab (sections 215 to 221) all provide for the withdrawal of restrictions tending to exclude persons in distress from the full benefit of the natural products of Government forest or waste land containing an important supply of edible forest-produce. If the forest is protected or reserved, application has to be made, in Bengal and the Punjab, to Government, and in Bombay to the Commissioner and Conservator of Forests.

The Bombay (section 162) and the Punjab (section 221) Codes also provide for the utilisation of forests for the supply of fuel, hutting materials, etc. This provision does not appear in the Bengal Code.

The North-Western Provinces Code (section 142) and the Madras Code (section 141) each devote one section, which is identically the same, to this subject. They provide that "where forest-produce is utilizable as human food, every facility should be afforded by the Forest Officers to persons seeking such food in forest reserves."

The Central Provinces Code has one section (117) which says the "local Government may in time of scarcity permit distressed persons to gather, free of charge, edible products in Government forests."

The Burma Code (section 113) requires that the Commissioner, on the report of the Deputy Commissioner, shall arrange with the Conservator for allowing edible forest-produce to be gathered in reserves.

CHAPTER XIII.

DUTIES OF POLICE.

The Provisional Code, Chapter VIII, prescribes the following duties for Police Officers:—

In seasons of scarcity all officers in charge of police stations have to submit special reports from time to time on the following matters, and the Superintendent has to submit these reports, with his own remarks, to the Magistrate:—

(1) Increase in crime due to rise in prices or scarcity.

(2) Wandering of needy or starving persons.

(3) Migration or immigration.

(4) Deaths due to want of food.

(5) Cases of starvation or severe want.

(6) Decrease in the above symptoms.

The Superintendent has to organize a system of patrol to visit lanes and bye-ways, etc., and to conduct starving wanderers

to where they can get relief; he has to take extra precautions for the protection of markets, grain-stores and lines of communication, and he has to take steps for increasing his force when necessary.

Every officer in charge of a police station is to be furnished with an advance of money to meet urgent cases of starving wanderers, and lastly, the police have to see that corpses found by the roadside are properly disposed of.

These provisions are practically reproduced in all the Codes with only slight divergencies.

Bengal Code.—In Bengal the duty of submitting in ordinary times the periodical crop and weather reports, which in other provinces is performed by the subordinate revenue establishment, is performed by the police. In seasons of scarcity or famine these reports are to be submitted weekly in addition to the special reports under the six heads mentioned in the Provisional Code. A copy of these reports is submitted to the Subdivisional Officer, the original being sent up to the Magistrate. There are no other divergencies in the Bengal Code calling for notice. But there is a provision (which for obvious reasons is not required in other provinces) that whenever patwaris or village accountants are appointed in temporarily-settled districts they shall be called upon to submit reports similar to those required from the police.

Madras and Bombay Codes.—The duties of Police Officers are prescribed much the same as in the Provisional Code, and the Superintendent is made generally responsible for keeping the Magistrate fully informed of all signs of approaching distress.

Punjab Code.—The Punjab Code contains a provision that the District Superintendent of Police should obtain from the Civil Surgeon, for the guidance of his subordinates, a simple statement of the kind and quantity of food which should be given to starving wanderers.

Burma Code.—This Code omits the provision for furnishing Station Officers with an advance to meet urgent cases of starving wanderers.

CHAPTER XIV.

Duties of Medical Officers.

The provisions relating to the duties of Medical Officers are as follows in the Provisional Code (Chapter IX) :—

The Chief Superintending Medical Officer has to call for special monthly reports, under prescribed heads, from Medical Officers in civil charge of districts and himself report to Government. He has to issue such special instructions as may be necessary regarding the treatment of famine patients and in regard to their diet; and himself, when necessary, personally inspect and be responsible for the medical arrangements for famine relief. He has also to see that the staff is adequate, and at the end of the operations submit a general report.

The Medical Officer in civil charge of a district has to send copies of his monthly reports under the prescribed headings to the District Officer and bring to his notice starvation deaths, etc., and deficient sanitary arrangements connected with famine institutions. He has also to inspect the labourers on relief works and visit the hospitals at relief works or poor-houses and assist generally, if required by the District Officer to do so.

A Medical Officer or competent subordinate is, if possible, to be attached to every poor-house and large relief work. The Medical Officer on the work shall have charge of the hospital attached to it, and shall inspect the labourers, water-supply and conservancy arrangements.

If any dispute arises between the Engineer or Civil Officer in charge of a relief work and the Medical Officer attached to

it regarding any matter connected with hospital management, sanitation or the health of the people, the Engineer or Civil Officer may refer the dispute, through the District Officer, to the Chief Civil Medical Officer. But pending the reference he shall be bound to act in accordance with the Medical Officer's opinion.

The Provisional Code also contains a provision to the effect that if the wage paid or ration given on any relief work or in any famine institution appears to the Medical Officer in charge of the district to be insufficient, he may report the matter to the District Officer, who may order the ration to be increased, pending the Commissioner's order. This provision has been omitted from all the Provincial Codes.

The Provincial Codes of *Bengal*, the *North-Western Provinces*, the *Central Provinces* and *Burma* follow the Provisional Code very closely. Only the following divergencies need be noted :—

In Bengal, the District Medical Officer's special monthly report is to embrace ordinary district hospitals and dispensaries as well as special famine institutions. And the Chief Superintending Medical Officer, instead of issuing instructions in regard to the diet of famine patients, shall, except in urgent cases, advise Government as to alterations to be made in the rules.

In the North-Western Provinces Code the Inspector-General of Civil Hospitals is the officer who performs the duties of the Chief Superintending Medical Officer.

In Burma, the Sanitary Commissioner performs the duties of the Chief Superintending Medical Officer. The special monthly reports from District Medical Officers are submitted through the Deputy Commissioner and the Commissioner, and the Sanitary Commissioner's monthly abstract report goes to the Financial Commissioner instead of to Government.

It is to be noted that in the Bengal, North-Western Provinces and Central Provinces Codes the Sanitary Commissioner finds no place, while in the Burma Code the Chief Medical Officer finds no place.

In the *Punjab* Code (sections 229 to 245) the provisions are in the main practically the same as in the Provisional Code, but they are somewhat more elaborate and have been expanded so as to bring in the Sanitary Commissioner as well as the Chief Superintending Medical Officer. The Inspector-General of Civil Hospitals is the officer primarily responsible to Government for the medical arrangements, and it is he who performs the duties assigned to the Chief Superintending Medical Officer in the Provisional Code. The District Medical Officer has to perform all the duties prescribed in the Provisional Code for him, and is expected, as a rule, to visit each large relief work before it is opened in order to make the necessary sanitary arrangements and subsequently to make frequent inspections. Very detailed rules are laid down for the guidance of the Medical Officer attached to a relief work or a poor-house hospital. The Sanitary Commissioner and his Deputies are especially in charge of relief measures in their sanitary aspect, and have to inspect and report. Instructions for their guidance are given. One important instruction is that the Sanitary Commissioner is to take measures, under the orders of Government, for testing the adequacy of the rations and report any case in which he considers the prescribed ration insufficient.

In the *Madras* Code (sections 149 to 187) the "Medical and Sanitary Rules" are also more detailed than in the other Codes dealt with above. The Surgeon-General with the Government of Madras is the officer primarily responsible for making the medical arrangements and for issuing instructions for carrying them out. He has also to inspect, to issue instructions in regard to hospital diets and the use of extra food or drink for patients, and submit monthly statistics of sickness and mortality to Government. A place is also found for the Sanitary Commissioner whose duty it is to inspect, under the orders of Government, poor-houses and relief work camps and to report

References to the Report of the Famine Commission, 1898.

on the sanitary arrangements, condition of the people, etc. He will also "further take measures for testing the adequacy of the rations prescribed for labourers and for those who receive gratuitous relief." This last prescription is also to be found in the Bombay and Punjab Codes, but in no other.

Then follow detailed rules, which need not be reproduced, under three heads:—

(*a*) District Medical and Sanitary Officers.

(*b*) Duties of Executive Medical Officers on works.

(*c*) Duties of Executive Medical Officers in poor-houses.

The District Medical Officer will, in all matters connected with the general administration of famine relief, act under the authority of the Collector, but will on all professional and departmental points be guided by the orders of the Surgeon-General.

In the *Bombay* Code (sections 169 to 178) the whole medical staff employed on famine relief is subordinate to the Sanitary Commissioner, who is responsible for relief measures in their sanitary aspect, subject to section 31 (which provides for the Collector being the responsible head and director of famine operations in his district). The scope of the Sanitary Commissioner's duties is clearly defined under detailed heads. The Deputy Sanitary Commissioners are to act under the orders and control of the Divisional or the Famine Commissioner.

The duties of the Surgeon-General with the Government of Bombay are confined to supplying such staff as is required by the Sanitary Commissioner and to complying with district requisitions for medicines, etc.

The duties of the Civil Surgeon are defined. He is placed under the general orders of the Collector, and his sphere of action is restricted to the head-quarters of the district. He retains medical charge of relief institutions at head-quarters, and is responsible for complying with indents for medical requisites within the district. Among other duties he has to "carefully and scientifically study the peculiar phases of disease prevalent among the famine-stricken" and to make *post-mortem* examinations.

A special District Medical Officer is to be appointed to each district who has medical charge of the whole district outside the head-quarters station. This is an arrangement which, it may be noted, is peculiar to the Bombay Presidency.

Detailed rules are prescribed for the guidance of subordinate medical officers and for medical arrangements for works and hospitals.

CHAPTER XV.

ACCOUNTS.

The Provisional Code said that rules under this chapter will be drawn up by each local Government in accordance, as far as possible, with the system in force in the province. — Chapter VI. Paragraph 467.

It is not necessary to examine here the system in force in each province.

THE ORDER OF SUCCESSIVE USE OF THE APPROVED MEASURES OF RELIEF, AND THE CONDITIONS DETERMINING WHEN PARTICULAR MEASURES OF RELIEF SHOULD BE EMPLOYED OR SHOULD NOT BE EMPLOYED. — Chapter VI. Paragraph 529.

The Codes are not always very explicit on these points, but the system in each province appears to be as follows:—

Bengal.

1. Test works—At first indications of distress, according to the District Officer's discretion—Section 11.

References to the Report of the Famine Commission, 1898.

2. Conversion of ordinary works into relief works—As test works or when it is decided that relief works are required—Sections 11 and 56.

3. Small relief works—In early days of scarcity—Section 53.

4. Large relief works, the back-bone of the system of relief—In the later stage of a famine—Section 53.

5. Village gratuitous relief—As soon as relief works are undertaken and it is found that there is a demand for relief to the men—Section 41.

6. Relief to children unfit to work, and adult dependants of labourers by means of allowances to the working members of the family—It is apparently contemplated that this system should be introduced immediately after the test work stage is passed and that it should be continued until the famine becomes very severe; the sanction of Government is required previous to its introduction—Section 84.

7. Central village kitchens for feeding the children of a group of villages—To be introduced at some undefined period of the famine—Section 119.

8. The extension of these kitchens to the children and dependants of relief workers—When the famine becomes very severe—Sections 83, 84 and 120.

9. Poor-houses—To be started when famine becomes severe and the other remedies of relief works and village gratuitous relief are insufficient—Section 109.

10. Suspensions or remissions of land revenue—According to necessity—Sections 15 (3*b*) and 29(9*b*).

11. Advances and loans—The procedure in regard to loans and advances is not very clearly laid down—Section 24 (8).

Madras.

1. Test works—At first indications of distress according to the Collector's discretion—Section 17.

2. Conversion of ordinary works into test works or relief works—Section 17.

3. Expansion of ordinary works at commencement of distress—Sections 16 and 57.

4. Relief works (without distinction between large and small).

5. Central kitchens for all who cannot earn wages on relief works and are otherwise unable to support themselves—To be opened in the early stages of distress—Section 64.

6. Kitchens on large works for non-working children and persons temporarily disqualified for work—To be opened presumably as soon as the works are opened—Sections 66 and 114.

7. Relief to non-working children and dependants of labourers by means of money-doles in cases in which kitchens are not opened in connection with works—Sections 91, 92 and 114.

8. Poor-houses for wanderers who cannot be satisfactorily looked after in kitchens—To be introduced apparently at a later stage of the distress—Section 68.

9. Village gratuitous relief—When and where decided to be necessary, but apparently at a later stage—Section 75.

10. Suspensions or remissions of land revenue—Early—Section 18.

11. Advances and loans—Early—Sections 20, 126, and 127.

Bombay.

1. Test works—At first indications of distress according to the District Officer's discretion—Section 18.

2. Conversion of ordinary works into test works—When test works are required—Section 18.

3. Relief works—Presumably large.

4. Small relief works for (*a*) people whom it may not be expedient to draft to a distance or (*b*) to afford employment for those needing it before scarcity has deepened into famine or before large works are ready or towards the end of a famine when it is expedient to bring back the relief workers to the vicinity of their homes—Section 100.

5. Kitchens on all works for non-working children if possible, and for adult dependants on small works—Sections 124 to 127.

6. Poor-houses on large works for adult dependants—Section 125.

7. Cash allowances to non-working children and dependants of labourers when they cannot conveniently be given cooked food—Section 133.

8. Poor-houses—Presumably early in the distress—Section 119.

9. Village gratuitous relief—Presumably early in the distress—Section 54.

10. Suspensions or remissions of land revenue—Early—Section 137.

11. Loans and advances—Presumably early—Section 143.

North-Western Provinces.

1. Test works—At first indications of distress according to the District Officer's discretion—Section 24.

2. Conversion of ordinary works into test works or relief works—Sections 24 and 60.

3. Temporary expansion of ordinary works—At commencement of distress—Section 60.

4. Small relief works—In early days of scarcity—Section 63.

5. Large relief works, the back-bone in the later stage of famine—Section 63.

6. Cash allowances to non-working children and dependants of workers—So long as kitchens are not opened for them—Section 99.

7. Village gratuitous relief—At the Collector's discretion when the scarcity is so great as to require it—Sections 54 to 57.

8. Central kitchens for children whether or not belonging to workers—When famine is severe—Section 199.

9. The extension of these kitchens to adult dependants of workers—When famine is severe—Section 119.

10. Poor-houses—Presumably when famine is severe, but this is not stated—Sections 110 to 118.

11. Suspensions or remissions of land revenue—To meet impending distress—Section 23.

12. Loans and advances—To meet impending distress—Section 23.

Central Provinces.

1. Test works—At first indications of distress at the District Officer's discretion—Section 13.

2. Conversion of ordinary works into test works or relief works—Sections 13 and 40.

References to the Report of the Famine Commission, 1898.

3. Small relief works—In early days of scarcity—Section 48.

4. Large relief works, the back-bone at later stage of famine—Section 48.

5. Cash allowances to non-working children and dependants of workers—So long as kitchens are not opened for them—Section 77.

6. Village gratuitous relief—At Commissioner's discretion when the scarcity is so great as to require it—Sections 34 to 37.

7. Central kitchens for children whether or not of workers—When famine is severe—Sections 96 and 97.

8. The extension of those kitchens to adult dependants of workers—When the famine is severe—Section 96.

9. Poor-houses—Presumably when the famine is severe, but this is not stated—Section 87.

10. Suspensions or remissions of land revenue—To meet impending distress—Section 14.

11. Loans and advances—To meet impending distress—Section 14.

Punjab.

1. Test works—At first indications of distress at District Officer's discretion—Section 42A.

2. Conversion of ordinary works into test works—Section 42A.

3. Development of ordinary works—In early stages of distress—Section 106.

4. Small relief works—At earlier stage—Section 29.

5. Large relief works—When famine is severe or protracted—Section 29.

6. Kitchens on relief works for non-working children and dependants of workers—Section 140.

7. Cash allowances for non-working children and dependants of workers—If Government is satisfied that this system is more convenient, equally efficient and not more expensive than kitchens on works for them.

8. Village gratuitous relief—At Commissioner's discretion early in the scarcity—Sections 69, 88 *et seq.*

9. Central kitchens for children—When the system of village gratuitous relief is considered undesirable or insufficient—Sections 194 and 196.

10. Poor-houses—Apparently when the famine is severe—Section 179.

11. Suspensions or remissions of land revenue—Early—Section 43(*b*).

12. Agriculturists' loans—At close of famine—Section 48.

Burma.

1. Test works—On occurrence of serious failure of crops—Section 22.

2. Small works—In early days of scarcity—Section 71.

3. Large works, the back-bone of relief—Section 71.

4. Cash allowances to non-working children and dependants of workers on a prescribed scale—Section 106.

5. Gratuitous relief—At Deputy Commissioner's discretion—Section 67.

6. Remissions of revenue—Early—Section 21.

7. Agricultural advances—Early—Section 21.

Note on the Task of a carrier unit on Famine Relief Works.

One great advantage of the system of classifying relief labourers as diggers and carriers is that under it the task can be regulated so as to suit the capacity of the carriers, by the simple method of changing the proportion of carriers to diggers, and without resorting to a system of multiple classification, which is that contemplated in the existing codes and their appended task-tables. In order to facilitate the proper adjustment of the carriers' task to the capacity of the ordinary relief labourer, a formula was proposed by me in the report on the management of famine relief works submitted to the Government of India in 1897. This formula has been criticised by many of the witnesses who appeared before the Commission and the opinions given on this technical matter will be reviewed in the present note.

2. The formula was intended to provide a fair and uniform measure of the work to be done by the carriers under all the varying conditions of lead and lift which may be expected to occur in practice on famine relief works, and suggestions were also made as to the fair normal task for an ordinary carrier on relief works expressed in terms of this measure. The measure of the task for a party of carriers was taken as the product of the quantity of earth to be removed in cubic feet multiplied by the distance in lineal feet of the *reduced lead* over which it was to be carried. This *reduced lead* was considered as including three separate factors, the initial effort, the horizontal lead, and the vertical lift. The allowance for initial effort represented the time lost in each trip by the first in a line of carriers in waiting to receive the basket from the digger or filler, and the energy exercised in lifting the basket to the head before carrying it away. It was assumed that the time and labour thus lost or expended by the first carrier was equivalent to carrying the load through a horizontal lead of 72 feet, but that this allowance covered also the first 3 feet of vertical lift. Every foot of vertical lift in excess of the first 3 feet was taken as equivalent to 12 feet additional horizontal lead. Symbolically the proposed formula may be expressed as follows :—

Let D = the digger's daily task, or quantity of earth to be removed in one day by the carriers, in cubic feet.

R = The *reduced lead* through which the earth has to be carried in lineal feet.

H = The horizontal lead in lineal feet.

V = The vertical lift in lineal feet.

T = The measure of the task to be done by the carriers.

N = Number of carriers required.

C = The measure of the task for an individual carrier.

Thus—

$$T = D\,R = D\,[72 + H + 12\,(V - 3)],$$
$$= D\,(36 + H + 12\,V) \qquad (a),$$

provided that V must never be taken as less than 3 feet.

Also $T = N\,C$.

$$\text{or } N = \frac{T}{C} = \frac{D\,(36 + H + 12\,V)}{C} \qquad (b).$$

The value of C, or the task for an individual carrier expressed in the proposed measure, will depend on the general capacity and physique of the labourers, but it was suggested that the task for an ordinary famine carrier, generally a woman, might be taken at 10,000, although in some cases, as in Bengal, the value appears to have exceeded 12,000, while in others the task actually performed by the carriers averaged much below 10,000.

There are thus two questions involved, the merits of the formula (*a*), as expressing a measure of the work to be done by a body of carriers under varying conditions of lead and lift, and the value to be assigned to C, or the average task that may be expected from an ordinary famine cooly, expressed in terms of that measure.

3. In Bengal evidence on these points was tendered by the Honourable Mr. Glass, Chief Engineer and Secretary to Government of Bengal, Public Works Department, who had prepared the excellent task-tables which were used throughout this province during the late famine. Mr. Glass stated that in the case of soft soil the formula practically agreed with the Bengal task-tables for proportion of carriers to diggers, but that in hard soils the formula allowed a less number of carriers than the tables. He accepted the value of C that had been proposed, and thought that tables based on the formula showing the proportions of carriers to diggers under varying conditions of lead and lift and soil should be drawn up and should find a place in all Provincial Famine Codes.

After giving his evidence Mr. Glass forwarded to me some calculations in which the formula had been analysed and compared with the task-tables that were in force in Bengal. After making some corrections, due mainly to a misapprehension, I found that the slight difference between the proportions of carriers to diggers in hard soils given by the formula, and those prescribed in the Bengal tables, was due not to any fault in the formula, but to a defect in the compilation of the tables which had been adapted primarily to the conditions obtaining in tank work, and in which certain assumptions had been made for the sake of simplicity which would not be permissible in a more general formula. It was found, however, that if the tables for hard soils were corrected, the formula would agree very closely with the tables for all classes of soil, if the value of C were taken at 12,000 and that the tables, like the formula, really involved the assumption of an allowance of something very like 72 feet horizontal lead for the initial effort, and an equivalent of 12 feet horizontal lead for every foot of vertical lift. These conclusions were communicated to Mr. Glass, who accepted them unreservedly.

4. Mr. DeWinton, Chief Engineer and Secretary to the Government of Madras, Public Works Department, did not think any elaborate tables of reduced leads necessary, but stated that in the tables he had drawn up he had followed the old custom in Madras of allowing 10 yards additional lead for every yard of lift, which is simple, adequate and well understood by the people.

In Appendix X to the Final Famine Report for the Madras Presidency, task-tables are given, which were drawn up by Mr. Johnston, Executive Engineer, Kurnool Division, in which the tasks for carriers are separately shown, and are based on the formula—

$$B = \frac{31{,}680}{H + 33}$$

in which B is the number of baskets removed by the carriers in a working day of 8 hours, it being assumed that the basket load varies according to the class and sex of the worker, but that the same number of baskets are removed by carriers of all classes. These loads vary from 0·6 cubic foot for a male of class A to 0·2 cubic foot for a female of class C, that for a female in class B being 0·3 cubic foot.

In this formula no allowance is made for the lift, apparently because the lift was small in all the Kurnool relief works. It will be observed, however, that the outturn of work is assumed to vary with H + 33, or in other words that an addition of 33 feet for initial effort is made in all cases to the horizontal lead, instead of 72 feet as in the formula proposed by me. The great majority of the carriers were females who were placed in class B, and the full tasks assigned to them may be expressed as below in the measure of the proposed formula:—

Lead. H.	Basket load.	No. of trips. B.	Quantity carried. D.	Reduced lead. R.	Measures of the task. D R = C.
Lin. ft.	Cub. ft.	No.	Cub. ft.	Lin. ft.	
50	0·3	382	115	122	14,040
500	0·3	60	18	572	10,296

The value of C in Bengal was generally about 12,000, but owing to the small allowance for initial effort this value in Kurnool appears to have varied from 14,000 to 10,000 according to the length of the horizontal lead. It must be remembered, however, that the Madras carriers all received the B wage, whereas in Bengal they received the wage of class D. Also in Kurnool all tasks were reduced by 10 per cent. as an allowance for the weak members of the gangs, while in many cases the reduction on this account was 20 per cent., and further reductions were made on account of the distances from which people came to the works. If the fair value of C for an ordinary famine carrier, entitling to three-quarters of the full or maximum wage, be assumed at 10,000 my proposed formula might be written in the form of that used in Kurnool, thus—

$$B = \frac{33{,}333}{H + 72}$$

5. In Bombay four Engineer officers have referred to my formula in their evidence. The general opinion is that it may be accepted provisionally and tentatively, and that the value of C may be fairly taken at 10,000, though some think this may be too high. Some doubts were expressed as to the proposed ratio of horizontal lead to vertical lift (12 to 1), as the ratio in the Bombay tables is 20 to 1. It was generally admitted that this was probably too high a ratio, but it was thought that 12 to 1 would be found too low in many cases and that an intermediate ratio of 15 or 16 to 1 would be more appropriate, though no officer had made any special observations with the object of determining this

ratio. On the other hand, it was thought that the allowance for initial effort was too liberal for Bombay, because in *muram* soil fillers are almost invariably employed, who fill baskets and lift them on to the carriers' heads. In regard to this objection it is possible that the allowance for initial effort should be slightly reduced when able-bodied fillers are employed, but the allowance depends more on the loss of time that occurs in waiting for the basket before commencing than on the physical effort involved in lifting the basket.

It has also been objected that this allowance for initial effort should include the first 5 and not only the first 3 feet of vertical lift, on the ground that the basket is lifted 5 feet to the head of the carrier. In practice however the carrier cannot deliver at a level of less than 2 feet below the head, and for an actual lift of 5 feet would have to ascend not less than 2 feet.

6. The formula has been examined by Mr. Penny, Superintendent of Works in the Central Provinces during the late famine, who finds that it gives results for short leads and low lifts in close agreement with the practice on relief works in those provinces, and that for long leads and high lifts the derived tasks are at least more consistent than those given in the task-tables prescribed in the provincial code. For high lifts the tasks calculated in accordance with the formula will be much heavier than those in the code task-table, in which every foot of lift is taken as equivalent to 20 feet of horizontal, but in actual practice there appears to have been no relief work with a high lift in the Central Provinces.

7. The formula has not been criticized by any of the witnesses in the North-Western Provinces and Oudh, but it was accepted by the officers appointed to consider the amendments required in the provincial famine code as a useful guide in regulating the proportion of carriers to diggers when such regulation is possible, and as such has been embodied in the draft of the revised code. In the Punjab doubts have been expressed by Colonel Jacob, Chief Engineer, as to whether the quantity of earth carried as a head load should be the same, expressed in cubic feet, for all classes of soil, and whether it should not vary in some degree with the heaviness, though it was admitted that very often in practice the quantity put into baskets was no greater for light than for heavy soils. Colonel Jacob stated that, on watching some ordinary professional labourers engaged on earth-work, he found that the value of C or the task performed by each carrier, in the terms of the proposed formula, amounted to 30,800. On the Jhelum canal relief works the value of C varied from 7,000 to 8,500, but the carriers were not fully tasked, and he considered 10,000 a low value for an ordinary famine cooly.

8. In the rules for the conduct of relief works in Burma, drawn up by Mr. Watson, the Executive Engineer in charge of the relief work, task-tables have been given which are based on the formula, $N = \frac{T}{C} = \frac{DR}{7,000}$ where N equals the number of woman carriers required.

The value of C, expressed in terms of the Burma formula, is therefore 7,000 only, but the reduced lead R is not calculated as in the proposed general formula. In the first place it includes no allowance for the initial effort, though initial effort is recognized for very short leads, as the rules provide that R shall never be taken as less than 100 feet, however short of this the actual lead may be. In the second place, the rule for the conversion of vertical lift into horizontal lead differs considerably from that proposed. No allowance whatever is made for lifts not exceeding 5 feet, and for higher lifts the equivalent horizontal leads are taken as follows:—

Lift.	Lead.	Lift.	Lead.	Lift.	Lead.
Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
6	7	14	75	22	180
7	14	15	85	23	195
8	21	16	98	24	210
9	28	17	111	25	225
10	35	18	124	26	242
11	45	19	137	27	259
12	55	20	150	28	276
13	65	21	165	29	293

This table is based on the view that the higher the lift the greater is the equivalent horizontal lead for each extra foot of lead, which is taken as 1·7 for each foot over 25 feet. This is perhaps correct when the horizontal lead does not increase proportionally with the vertical lift, so that the earth has to be carried up a steeper ascent. It will be seen, however, that even in the case of a lift of 29 or 30 feet the equivalent horizontal lead for the whole vertical lift is under these rules only as 10 to 1, while for lower lifts it is much less.

9. These Burma task-tables are interesting, as they have been prepared in connection with a large and very successfully conducted famine relief-work, and independently both of the new proposed formula and of the task-tables in existing codes. The carriers' task, or value of C as prescribed in these tables, may be thus expressed for different leads and lifts in the terms of the proposed general formula:—

Horizontal lead in lineal feet.	Vertical lift in lineal feet.		
	5 feet.	15 feet.	25 feet.
50	10,220	10,065	8,314
100	13,720	11,956	9,391
200	10,360	10,218	8,828
500	8,344	8,567	8,072

These are the tasks for women carriers; men are assumed as able to do double these tasks, and children are given half tasks, but in practice there were very few men among the carriers in Burma. It will be seen that for ordinary leads and lifts the value of C may be taken at about 10,000, the irregularities in the table being due mainly to the want of allowance for initial effort, except for leads considerably less than 100 feet.

10. From this summary it may be inferred that formula (*a*) may be regarded as a convenient and appropriate expression for measuring the work to be done by carriers under all the different conditions of lead and lift that are likely to occur in ordinary practice on famine relief works. The form is one which may be expected to give fairly consistent results, though some modification of the constants may be contemplated when justified by peculiar conditions or special experiments. As to formula (*b*) the only question is as to the most approximate value for the constant C, or task of the individual carrier unit, expressed in the measure adopted, and the recorded opinions point to the conclusion that this may be taken as varying from 12,000 to 8,000, according to circumstances, and that for ordinary relief labourers 10,000 may be accepted as a fair average.

11. A few officers have disputed the necessity for a standard task and have claimed that a very wide discretion must be left to the officer in charge of a relief work in such matters. But it is not proposed that the standard task should be a uniform task or even that the standard itself should be uniform. The object of a standard is to provide a consistent guide or measure, with which actual tasks may be compared, and to ensure uniformity of tasking among labourers in the same physical condition. Deviations from such a standard may be contemplated when necessary, but the systematic organization of relief labour will none the less be facilitated if such a standard be set up, so that the extent of deviations from it may be known.

12. In some provinces, when earth-work is generally carried out in hard *muram* soil, it is the practice to employ fillers to break up the clods and fill the baskets, so that there are three classes of labourers—diggers, fillers and carriers. The question has been raised by some officers whether fillers should be regarded as diggers or carriers. As regards wages they may of course be paid either as one or the other, according to capacity, but as regards tasking it will generally be simpler to treat them as diggers, and to fix the

diggers' task on the assumption that for a certain quantity of earth so many diggers and fillers are required. Reference has already been made to the suggestion that the allowance for initial effort should be reduced when fillers are employed, but the proper reduction in such cases will probably always be small, for reasons which have been given.

13. Task-tables can be easily derived from the accepted formula in whatever form may be most convenient, either for incorporation in the famine code, or for the guidance of the subordinates employed on a work. The form will vary according to circumstances, but simple tables adapted to the conditions on a particular work can be drawn up at any time without difficulty, as it will generally not be possible for subordinates of the class usually employed in organizing the gangs to work directly from a formula.

T. HIGHAM.

Note on Village Works for the Relief of Distressed Agriculturists.

The great majority of the people depend for their food-supply on the yield of the kharif crops. Distress consequent on an unfavourable agricultural season thus begins to manifest itself as soon as it becomes clear that the kharif will be a failure. When a rabi failure supervenes, the distress is accentuated; but barring localities where wheat is the predominant crop and forms the staple food of the people, it does not assume a type calling for State intervention, except when the threatened loss of the kharif is so great and wide-spread as to foreshadow a serious curtailment of the food-supply dependent on it. When a condition of things like this exists, the signs of suffering begin to show themselves and attract attention by the middle or end of October, and by the beginning of December it becomes necessary to start relief operations. The first to suffer from the effects of the unpropitious season are the people in the villages, who live on the wages of such labour as is ordinarily available in the fields; and as they constitute a numerous class, employment on a scale commensurate with their wants can only be provided for on works on which a considerable number of labourers can be concentrated, that is, large works. Apart from the circumstance that if relief is to be restricted to those only who really need it, the employment offered must not be made too attractive by taking it close to the doors of the people; such works must necessarily be at a distance from the homes of the majority of the workers. Though submission to a distance test ought not to be made a condition precedent to the grant of relief, yet where it cannot be successfully arranged for except by means of large works, discomforts inherent in such a system of relief have to be endured. There is no special hardship involved in this so far as the majority of the workers are concerned, for the ordinary agricultural labourer is accustomed to works in villages other than that where he has his home; and although the distances he has to cover in order to earn a living may not be very long, yet they are often not inconsiderable. As, however, the distress deepens, another and more important class of the community begins to feel the need of State relief. The small self-cultivating owners and tenants living on the profits of their cultivation are generally possessed of more staying power than the ordinary labourers and are thus able to do without extraneous aid longer than the latter. But a time soon arrives when their resources, which are seldom large, are exhausted in their struggle against the adversities of the season, and they then begin to feel the pinch. By the end of January, by which time the fate of the rabi is also practically decided, it becomes necessary to concert measures for their relief. Now these people, though poor and leading a simple village life and accustomed to labour in their own fields, belong to a much higher *stratum* of society than the ordinary labourers. Their women in most places work in association with their male relations, but they do not hire themselves out to other cultivators, far less go out of their villages in quest of employment. Life at ordinary relief works with its privations and inconveniences, its enforced companionship of strangers and exposure of their womankind to the familarities of all manner of men gathered together at a relief camp, is highly repugnant to the feelings of these people. In their case, the usual labour-test by which the reality of the distress and the resulting need for relief is automatically adjudged oftentimes fails of its object by acting as a complete deterrent. Even where it has not this extreme effect, it operates in a much more severe manner than in the case of ordinary workers. Thus a test intended to have equal operation on all is converted into a test of an exceptionally hard character in the case of a class of men, whom perhaps it is much more important to help than the majority of those who crowd the relief works. If it be conceded that this inequality of treatment, inherent in a system which does not take cognizance of the special disabilities of any particular class, ought, as far as may be, to be removed or at least minimised: the only way this can be done is by introducing for the special benefit of such people a different class of works, which, while retaining as their essential characteristic the principle of a labour-test, shall be free from those features which tend to make ordinary works repellent to them. Village works calculated to promote the comfort and convenience and the material well-being of the village community, conducted on somewhat stricter rules as to tasks and rates of wages than obtaining on ordinary works, would meet the requirements of the case. These works will be construction and repair of wells, tanks and reservoirs for storage of water for drinking and irrigation purposes, irrigation channels, embankment of fields, the weeding of noxious weeds from fields, improvement of village roads and village-sites and the general sanitary condition of the village. The aid of local men of influence should be availed of in the selection of these works; their final approval and adoption must, however, rest with Government. After they have been thus ascertained, estimates of their probable cost should be prepared. The estimates need not be on strictly professional lines, except when the works happen to be large, but should be directed to give an approximate idea of the cost of the works, regard being had to what would constitute a fair task for the people to be employed and the current price of food. As regards the agency to be employed in carrying out the works thus selected, three methods suggest themselves:

(i) That they be carried out by the landlord of the village, he being accommodated with a loan on favourable terms as to interest and repayment, but burdened with the condition that it be applied solely to the execution of the selected works; that only distressed agriculturists be employed on them; and that the scale of wages be such as will be fixed by Government. In all other respects he will be unfettered in the exercise of his discretion.

(ii) That they be paid for and managed entirely by Government officers like other relief works.

(iii) That the management be through some local man of position and respectability, the village landlord if competent and willing, and failing him some other respectable person of the locality, who will work as the agent of Government and be subject to the control and supervision of Government officers. The cost will be borne, wholly or partly as may be arranged for, by Government.

Considering that the work is to be taken in hand as a measure of famine relief and carried out on relief conditions and is therefore likely to be more costly than if done at ordinary rates, it would not be right and proper to make the landlord bear the entire burden of the cost. Moreover in such a case, self-interest will often lead the landlord to employ only the most efficient labour, irrespective of the source from which it is drawn, at the lowest available rates. This conflict of self-interest with duty to the distressed villagers can be avoided by Government sharing the cost with the landlord, the proportion being fixed with reference to the real value of the work under ordinary conditions, the advantage likely to accrue from it to the landlord, his pecuniary position, and such like considerations. Thus works carried on by landholders at their own cost and on their own responsibility, though they will often provide employment to some extent to the agricultural community, may be left out of consideration for present purposes. There will then remain works to be paid for either wholly or partly by Government. Experience has shown that the most effective and at the same time economical method of carrying them out is to associate local men on suitable terms with officers of Government. The former with their local knowledge and influence are able to make arrangements with the villagers more suited to their habits and modes of life and more likely to ensure the most profitable employment of the money than the latter. The village landlord or headman, or such other person of the locality as may be appointed in this behalf, will be in immediate direct charge, but will work under the control and supervision of the officers of Government, who may be the staff employed in administering village relief, strengthened, if need be, by the addition of a professional (engineering) element. The work to be taken in hand will be marked out by an officer of Government, who may be the circle relief officer, and its estimated cost to be paid on its completion intimated to the person put in charge. It will be carried on with the aid of advances to be made from time to time. These will be adjusted when the work is finished on the payment-by-result system in accordance with the contract or settlement to be made in advance both as to the rates and the apportionment of the cost between the Government and the person in charge. When the person in charge is personally and pecuniarily interested in the successful carrying out of the work, the danger of relief intended for the distressed being intercepted in the process of distribution will, to a considerable extent, be obviated. Instances will no doubt occur where the person in charge will try to abuse his trust, but the village public opinion will be strong against him; and there are few people, whatever their position and local influence, who will dare disregard it, or be indifferent to it. There is, moreover, a special odium in a misappropriation of charity-money intended for the relief of distress caused by a general calamity like famine, and no man of respectability will care to incur it for the sake of a small gain. Again self-interest will impel the people of the distressed village to bring the misconduct of the person in charge to the notice of the Government officers, and this will constitute a check, more or less effective, against any possible abuse of his trust by him.

It may sometimes be possible and more convenient to give out the work on contract to the community of distressed agriculturists themselves without the intervention of any middleman.

As to restricting the benefit of these works to those for whom alone they are meant, some officers have stated as the result of their experience of the management of works executed by landholders with the aid of statutory loans that, other things being equal, they generally give preference to the higher classes of people in the village. It may not, however, be safe to make the success of the system rest wholly on the proper exercise of his good sense and discretionary powers by the village headman. When making advances, the men put in charge may be made to enter into agreements binding themselves under due penalty only to employ small self-cultivating owners and tenants in distress. A more effective method would be actually to piece out the work to these men under the supervision of a Government officer who may be the circle relief officer. They should be remunerated on the completion of the piece given them on the payment-by-result system just as their headman would be on the completion of the whole work. The remuneration to be thus paid should be so regulated as to yield a wage somewhat lower than the wage which could be earned on the ordinary open works. Except when otherwise specially ordered by some competent authority, no payment to dependants should be made. Conducted on these principles, the works will cease to have any attraction for the ordinary labourer, to whom it is no degradation to go to the ordinary works. Unless when debarred by some special cause, such as physical debility, necessity for attending on some sick relation and the like, he will not try to join

the village work and thus forego the opportunity of earning a better wage on the open works. Thus independently of the natural predilections of the headman for the distressed agriculturists of his village, a careful adjustment of the task to be performed and the remuneration to be earned by its performance will suffice to keep out all those whose presence on these works is not desired. The circle relief officer will also, during his periodical inspection, see that the person in charge does his duty in this respect, and will, if necessary, weed out persons not qualified for this special relief. Another method, that of selection on the basis of personal inquiry into each individual case, has been suggested, but there may be practical difficulty in carrying this out, although in some places the agency employed for giving gratuitous village relief may be utilised for this purpose. In any case it is more satisfactory to have a self-acting selection test depending on the comparative unattractiveness of the works.

The indirect advantage of this system of relief will not be inconsiderable. Many useful village works will thus be done. Disruption of families, dislocation of the agricultural organization and disintegration of the village community will be prevented. The cultivators will always be on the spot to take advantage of every favourable turn in the weather, and thus the prospect of the next harvest will be improved. Such opportunities are fleeting and come at uncertain intervals, but if seized at once, they are of inestimable value to the agriculturists. By refusing relief when offered by means of works which are uncongenial to them, they will not be reduced in condition. Their spirit and strength will, on the contrary, be kept intact, and they will be in a position to resume their usual occupation and attend to its duties in the usual way on the re-appearance of the ordinary condition of things on the subsidence of the distress.

SIMLA;
The 1st June 1898.

B. K. BOSE.

Average retail prices of food-grains in 1893, 1894 and 189

Province and District.			1893.	1894.	1895.	1896.						
						June.	July.	August.	September.	October.	November.	December.
1. North-Western Provinces and Oudh.	Cawnpore ...	Wheat	15·62	17·9	16·32	13	13	12·37	9·37	8·31	8·12	8·56
		Barley	22·77	24·33	20·31	16	15	14·62	11·25	9·5	9·12	9·25
		Gram	23·12	23·57	20·34	16·25	15·62	14·75	11	9·62	9·62	10
		Jawar	22·54	23·91	19·59	...	...	15·25	11·62	11	10·12	10·37
2. Punjab.	Lahore	Wheat	16·12	24·08	18·17	16	14·5	14	11	9·5	8·12	8·5
		Barley	26·92	41	31·37	21·5	19·5	19	14	11·5	9·75	9·5
		Gram	26·46	35·37	25·83	19	17	17	12·5	10·5	9·62	9·88
		Maize	18·42	34·12	23·54	14	16	15	13	12	10·5	10·88
3. Bengal.	Patna	Rice (common) ...	16·5	15·9	18·42	17	16·37	14·25	12·12	9·88	10·25	10·34
		Barley	22·43	22·79	24·21	21	19·5	17	15	11·5	11	12
	Darbhanga ...	Marua	24·17	23·67	26·23	25·5	26	22·5	20	16·25	15·5	13
		Maize	22·45	21·08	24·21	22	20	22	17·5	13·25	11·88	10
4. Central Provinces.	Nagpur ...	Wheat	15·48	16·61	15·1	13·75	13·75	12·81	12·19	9·69	8·44	9
		Jawar	18·85	20·11	18·36	17·81	17·81	18·75	18·12	12·81	11·28	1
	Mandla ...	Wheat	17·33	18·08	15·67	12·62	12·5	10·5	9·25	8·75	9·5	
		Gram	21·37	26·67	19·94	13·75	13	12	10·75	10·5	10·5	10·5
	Bilaspur ...	Rice	18·42	18·11	16·76	12·31	12·31	12·31	10·12	9	10	10·37
	Betul	Jawar	21·87	27·04	18·58	15·53	14·41	14·37	14·37	14·37	10·25	10·25
5. Bombay.	Poona	Wheat	11·08	13·52	14·09	12·81	12·81	12·81	11·22	8·12	7·28	7·84
		Jawar	17·09	18·27	20·08	20	20	20	18·81	9·97	9·97	9·97
	Bijapore ...	Jawar	20·56	22·66	27·18	25·19	25·19	25·19	20·69	12·59	9·91	11·25
6. Madras.	Bellary	Cholam... ...	21·81	23·87	29·73	31·12	30·62	30·62	25·75	13·12	11·09	13·87
		Ragi	23·4	24·41	30·25	29·12	29·12	29·56	25·72	16·5	13·59	17·44
		Rice (common) ...	10·55	10·79	10·86	10·81	10·81	10·81	10·25	8·37	7·81	8·91

NOTES.—1. This table which has been taken from

2. Jawar or cholam is a larger millet,

3. Marua or ragi is a small millet

and by months from June 1896 to April 1898.

1897.												1898.			
January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	January.	February.	March.	April.
9·12	9·12	9·37	10·44	10·37	9·56	9·94	9·5	9·62	10·5	10·87	11·00	11·62	12·60	13·75	13·93
9·75	10·62	12·25	12·37	12·5	11·25	12	12·25	12·87	14·25	16·75	18·00	20·75	21·5	22·25	21·75
9·83	9·62	10·5	9·75	9·5	9·12	9·25	8·75	8·62	9·00	10·75	10·62	12·25	13·25	18·87	20·75
10·62	10·62	10·37	10·5	...	...	...	...	...	...	19·75	19·75	21·5	21·75	22·25	24·00
9·88	8·44	7·97	10·31	12·06	11·78	10·5	10·06	10·96	11·28	10·78	11·75	12·75	13·00	14·00	14·5
11·12	11	9·88	13·31	13·88	14·69	14	12·56	14·31	15·62	15·5	15·37	14·31	19·00	23·5	27·5
11·5	10·31	9·94	11·75	11·78	10·84	10·15	8·71	9·25	10·46	10·30	11·68	12·37	14·00	15·5	20·00
11	11	10·12	10·5	7·25	7·75	9	8·5	11·25	15·5	15·93	16·56	17·25	18·00	19·5	24·5
10·25	10·25	10·25	9·37	8·75	8·62	8·12	8·5	9·5	11·00	12·5	14·5	15·25	14·75	15·5	14·5
12·5	12	14	13·75	13·25	12·5	11·5	12·00	12·75	12·25	11·00	16·5	17·5	17·25	18·5	23·5
12	12	12	11·37	11·12	11	9·62	14·5	18·25	19·00	21·00	24·00	23·00	20·5	20·5	20·00
9·88	9·62	...	9	9·5	9	...	11·37	14·00	15·00	17·00	18·5	18·75	20·00	19·25	20·5
9·37	9·37	9·37	9·06	8·75	8·28	8·12	8·12	8·43	9·06	9·5	10·31	10·93	10·93	11·25	11·25
13·44	11·5	10·94	10·09	10·66	8·91	8·91	9·18	9·18	11·21	12·06	17·22	18·40	18·40	18·09	18·09
9	8·25	9	8·25	8	7·5	8·25	8·5	8·75	9·12	9·00	10·5	10·75	10·25	12·37	14·00
10	10	11	10	9·25	7·88	7·88	8·5	8·5	8·5	8·00	8·25	10·5	11·00	17·00	22·00
10·69	10·84	9·12	8·62	8·5	8	7·56	7·56	9·12	12·00	16·00	16·00	16·00	16·00	16·00	16·00
10·44	9·75	9·06	8·5	8·5	6·75	7·56	8·00	8·00	...	15·18	16·00	18·90	20·15	20·5	19·25
8·12	7·84	6·37	6·66	6·94	6·94	6·94	6·93	6·37	7·00	7·00	7·00	7·00	8·72	9·31	9·31
10·56	10·28	9·37	9·37	9·37	9·09	8·25	7·34	8·54	9·56	11·75	11·75	13·53	14·68	15·25	15·25
11·72	11·69	9·88	11·25	10·41	9·06	7·62	7·62	10·59	14·37	14·31	16·75	18·6	21·15	22·5	22·5
13·12	12·37	11·59	12	11·62	10·72	9·15	8·5	11·84	13·62	12·25	13·62	15·43	18·06	20·87	19·56
16	16·5	16	16·5	16·5	15·06	14·12	13·12	17·00	17·37	16·5	16·43	16·93	18·37	19·37	19·37
9·19	9·19	9·19	8·62	8·62	8·12	7·88	7·62	8·12	8·12	7·87	7·62	8·12	8·62	8·62	8·62

the *Gazette of India* returns, gives the number of seers and decimals of a seer purchasable for Re. 1.

the *Sorghum vulgare.*

the *Eleusine corocana.*

Average annual retail prices of food-

Province and Division.	Rice.				Wheat.				Jawar or cholam.			
	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.
Upper Burma	...	11·16	10·95	10·81	...	10·57	13·27	8·54	...	...	...	...
Lower „	15·35	14·06	13·16	12·35	14·8	10·65	10·94	12·7	...	...	...	...
Assam	17·33	15·74	12·22	10·85	13·58	12·23	9·78	9·3	...	...	...	...
Bengal, Eastern	21·17	16·67	13·27	11·03	13·31	12·83	10·65	9·85	...	...	...	...
„ Deltaic	18·46	16·88	13·24	12·34	15·45	14·49	13·01	12·8	21·3	17·58	17·8	15·95
„ Central	21·61	19·26	14·59	13·47	16·64	15·73	13·54	12·07	...	...	...	...
„ Northern	20·23	18·76	13·05	12·48	15·17	15·12	12·29	10·53	...	...	...	...
„ Orissa	25·05	19·92	16·87	18·77	15·06	13·9	12·12	11·06	...	...	...	...
„ Chota Nagpur	24·42	20·73	15·74	13·54	16·24	15·31	12·23	10·43	...	...	...	...
„ Bihar, South	17·53	16·79	14·77	13·61	19·02	17·08	14·64	11·77	32·25	21·94	19·37	18·06
„ „ North	18·6	17·25	14·76	14·07	7·71	16·43	14·07	11·73	...	...	...	...
Average for Bengal	20·62	18·11	14·43	13·41	16·28	15·25	13·05	11·54	26·77	20·49	18·85	17·36
North-Western Provinces, Eastern ...	15·77	13·79	12·08	10·69	18·65	15·03	13·28	10·24	28·61	19·51	18·35	15·3
„ „ Central ...	13·92	12·45	11·13	10·02	20·64	16·56	15·39	11·01	27·55	20·39	20·33	13·43
„ „ Western ...	12·53	11·43	10·39	9·86	19·39	16·17	15·91	11·83	25·22	20·	22·16	13·74
„ „ Submontane, East	16·88	16·86	16·39	11·77	19·34	15·96	13·54	10·65	33·37	16·13	12·14	15·36
„ „ „ West	14·17	13·04	11·17	9·94	20·25	16·55	15·4	11·26	26·43	19·49	19·42	13·28
Average for North-Western Provinces ...	14·4	13·17	11·74	10·27	19·8	16·15	14·91	11·06	27·14	19·67	19·67	13·87
Oudh	16·55	14·81	13·61	11·7	20·86	17·13	15·02	11·18	32·92	21·78	20·83	14·33
Punjab, Southern	10·74	10·14	9·86	9·48	20·69	17·52	17·43	12·48	32·89	23·62	24·74	14·84
„ Central	11·43	10·9	10·8	10·03	23·1	17·64	18·12	12·91	30·83	22·09	22·86	14·1
„ South-Eastern	11·66	11·65	11	10·65	20·35	16·78	16·73	11·91	27·53	21·71	24·64	13·63

grains and salt (in seers per rupee) for quinquennial periods from 1881 to 1896.

Bajra or cumbu.				Marua or ragi.				Gram.				Maize.				Salt.			
1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.
...	...	...	...	...	...	...	...	...	9·44	11·69	9·31	...	15·7	25·42	19·34	...	19·03	13·41	12·99
...	...	...	...	...	...	...	...	13·47	10·23	10·78	10·44	...	21·8	20·14	19·82	23·77	19·8	15·21	15·48
...	...	...	...	...	...	...	...	12·84	12·85	11·01	10·43	17·27	8·63	10·48	14·62	10·21	9·72	9·36	9·18
...	...	...	...	...	...	...	...	16·2	14·18	12·74	12·05	...	...	...	...	11·02	10·16	9·64	9·21
...	...	...	...	...	...	...	...	18·81	18·61	16·07	14·14	24·85	19·46	18·26	14·93	11·78	10·78	10·63	10·08
...	...	...	...	...	...	...	...	20·61	20·25	16·66	15·34	...	...	...	...	11·5	10·76	10·27	9·88
...	...	...	...	...	...	...	...	15·52	16·44	14·51	13·42	...	...	...	...	11·08	10·48	9·77	9·34
...	...	...	...	...	...	...	...	17·98	15·84	14·77	14·87	...	...	...	...	12·27	11·17	10·79	11
...	...	...	...	34·08	32·52	27·02	21·64	18·01	15·95	14·17	12·6	30·28	27·47	20·72	17	9·26	8·89	9·18	8·53
...	...	...	...	...	...	...	...	26·83	23·29	19·7	16·58	33·68	25·36	21·14	18·82	11·16	10·64	10·55	10·15
...	...	...	...	30·08	26·23	22·42	22·67	23·4	21·48	18·05	16	34·06	24·35	21·31	19·8	10·69	10·56	10·43	10·43
...	...	...	...	32·08	28·33	23·95	22·33	19·95	18·59	16	14·45	33·34	25	20·85	18·37	11·14	10·46	10·2	9·84
25·63	19·95	17·09	13·03	...	19·03	18·96	13·61	25·19	21·56	18·86	14·46	31·35	21·74	19·51	16·8	9·71	10·39	9·38	9·64
25·5	19·1	18·35	12·35	...	17·56	18·66	15·1	26·62	23·03	21·11	14·06	32·11	23·75	21·5	14·86	11·17	11·46	10·87	11
22·59	18·17	18·71	12·26	...	16·13	10·23	...	23·95	23·28	23·98	14·76	29·54	23·61	22·23	14·82	12	12·11	11·38	11·42
25·15	17·92	...	10·65	...	19·03	15·95	16·92	25·64	21·86	18·39	14·05	...	21·36	19·73	16·83	9·38	10·53	9·86	9·96
24·11	18·59	16·92	10·9	...	25·43	20·41	14·73	23·31	21·88	21·4	14	30·61	22·98	20·93	14	11·45	11·38	10·59	10·78
25·2	18·86	17·68	11·85	...	20·68	17·44	15·09	24·72	22·31	21·02	14·24	30·62	22·89	20·96	15·06	10·92	11·26	10·57	10·65
27·45	19·63	18·18	11·77	37·35	30·03	25·61	16·87	25·25	23·95	21·55	14·99	31·3	24·22	21·88	15·9	10·1	10·85	10·35	10·62
28·16	20·88	20·09	11·68	...	...	...	...	32·3	26·71	28·54	17·3	...	20·83	22·91	16·39	12·20	12·65	11·74	11·78
27·18	18·62	19·39	12·91	...	...	...	...	28·85	23·62	24·79	16·09	...	21·59	21·87	15·51	14·16	13·8	12·97	13·46
23·10	28·74	10·53	11·82	...	21·5	20·28	14·17	26·11	24·7	26·04	15·29	26·42	20·63	21·03	15·04	11·62	11·3	10·5	10·89

Average annual retail prices of food-grains and salt

Province and Division.	Rice.				Wheat.				Jawar or cholam.			
	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.
Punjab, Submontane	11·95	10·9	10·19	9·63	24·13	18·75	18·26	13·05	33·7	23 34	23·11	15·18
„ Northern	10·02	10·45	8·48	8 24	21·66	17·04	16·87	11·87	33·51	24·18	24	17·18
„ Western	10·27	9·85	9·49	9·05	20·49	16·4	17·65	12·85	26·77	20·27	22·63	14·15
Average for Punjab	11·17	10·67	10·02	9·55	22·04	17·52	17·64	12·63	30·86	22·42	23·49	14·78
„ „ Sind	14·78	11·7	9·88	9·04	13·73	12·23	13·27	11·16	22·89	19 6	19·72	14·87
Bombay, Konkan	12·79	11·6	11	10·76	10·97	10·42	9·81	10·43	18·33	16·8	14·68	14·75
„ Deccan	11·69	10·68	10·44	10·98	16·95	14·32	13·34	13·29	25·16	21·02	19·95	20·73
„ Khandesh	11·36	9·99	10·12	9·88	16·33	14·03	14·54	12·69	24·11	21·47	21·75	20·12
„ Gujarat	11·4	9·65	10·01	9·26	13·52	11·77	11·99	10·49	20·2	16·53	17·12	15·08
Average for Bombay...	11·62	10·24	10·16	9·97	14·72	12·76	12·5	11·71	22·02	18·64	18·3	17·43
Central Provinces, Western	13·53	10·99	10·86	9·76	20·02	15·92	14·28	12·07	27·76	21·08	19·86	15·97
„ „ Central	16·94	13·16	12·62	10·7	23·65	17·56	14·66	11·77	34·1	20·52	18·12	14·95
„ „ Eastern	39·49	19·48	17·39	13·78	33·53	21·73	16·69	12·62	...	...	...	...
Average for Central Provinces	19·24	13·41	12·72	10·84	23·87	17·61	14·84	12·01	30·07	20·87	19·23	15·6
„ „ Berar	11·12	9·7	9·23	8·33	20·39	16·41	13·9	12·18	30·12	23·07	20·42	19·58
Madras, South Central	14·77	13·71	10·94	12·26	...	...	...	...	26·16	23·75	18·43	20·73
„ Central	12·93	13·31	10·89	10·52	...	...	...	...	30·78	27·5	21·68	24·41
„ East Coast, North	15·38	13·23	12·24	12·98	...	...	...	...	25·52	24·56	18·87	21·94
„ „ „ South	15·72	14·03	11·13	13·16	....	...	...	...	25·23	23·13	17 5	20·91
Average for Madras	14·79	13·61	11·37	12·38		...	...	...	27·25	24·52	19·12	21·92

(in seers per rupee), for quinquennial periods from 1881 to 1896—*contd.*

Bajra or cumbu.				Marua or ragi.				Gram.				Maize.				Salt.			
1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.	1881 to 1885.	1886 to 1890.	1891 to 1895.	1896.
25·84	18 92	17.8	12·55	...	17·88	15 68	14·37	30·65	24·81	25·05	15·93	35·45	24·14	23·69	16·4	13·78	13·5	12·67	12·79
30·57	20·08	19·93	13·16	...	...	...	...	25·88	21	21·31	14 14	40·05	23·57	22·48	15·58	26·67	27 66	26·57	19·58
26·48	19·1	9·9	13·66	...	19·2	21·79	18·25	27·33	21 09	24·74	14·99	23·29	19·11	20·01	14·7	23	19·98	18·6	15·61
26·44	19·23	19·15	12·68	...	19·13	19·89	16·26	28·72	23·69	25·09	15·61	33·45	21·84	22·05	15·55	16·62	15·96	14·99	13·76
22·45	18·73	17·99	13·97	...	...	...	...	19·57	15·36	17·17	12·65	...	...	...	...	13·67	11·87	11·45	11·8
15·25	14·16	13·66	14·12	17 88	18·73	16·41	16·91	15·77	13·8	12·1	11·28	...	18·17	...	...	12·44	11·64	11·12	11·42
23·07	19·43	18·78	17·66	24·95	24·11	21·41	19·77	18·09	16·87	14·22	13·42	...	19·11	...	...	11·73	11·58	11·56	11·44
19·44	17·14	18·2	16·16	25·44	20·91	21·04	19·69	20·59	16·08	15·47	13·97	...	...	...	...	13·62	12·76	12·18	11·74
17·04	15·3	14·9	12·78	20·9	18·82	19·49	17·5	18·59	14·86	16·38	12·44	...	22·44	...	...	13·99	13·46	12·33	12·19
18·91	16·53	16·33	14·82	21·66	20·59	19·3	18·06	18·4	15·16	15	12·55	...	20·54	...	...	14·36	13·82	14·19	14·17
25·78	20·8	20·22	16·92	...	..	...	...	24·08	17·95	17·15	13·16	...	...	...	...	10·6	9·95	9·6	9·77
...	...	...	...	...	...	...	...	31·09	21·09	17·86	13·48	...	...	...	...	9·75	9·6	9·11	9·1
...	...	...	...	...	...	...	...	29·63	18·68	16·72	12·35	...	...	...	...	8·98	9·1	8·93	8·89
...	...	...	...	...	...	...	...	28·27	19·56	17·42	13·18	...	...	...	...	9·94	9·65	9·26	9·32
23·4	18·42	15·67	14·11	...	...	...	...	22	16·16	14·8	12·59	...	...	...	...	10·56	10·16	9·79	10·05
27·41	23·11	18·74	20·87	29·72	27·97	20·82	23·26	...	...	...	...	...	...	...	...	14·66	13·53	12·52	10·98
29·47	27·81	19·91	20·72	31·18	27·96	22·99	22·57	...	...	...	...	...	...	...	...	14·42	12·5	11·78	11·48
25·67	24·71	24·43	23·99	29·5	24·3	23·14	25·14	...	...	...	...	...	...	...	...	13·45	12·16	11·67	11·78
28·22	24·75	18·49	24·86	30·52	27·65	20·16	25·25	...	...	...	...	...	...	...	...	15·43	13·06	12·41	12·36
27·55	24·27	18·91	22·47	30·39	27·02	21·58	24	...	...	...	...	...	...	...	...	14·64	13·13	12·38	12·08

Imports and exports of each kind of grain into and from British India by sea from and to other countries in each of the twelve months 1st October to 30th September 1891-92 to 1896-97, and from 1st April 1897 to 31st March 1898.

In cwt.

Kinds of grain.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	From 1st April 1897 to 31st March 1898.
	Imports.						
Barley	31,404	62,188	19,478	14,367	27,887	141,448	41,961
Gram	2,377	1,702	2,113	1,709	1,208	1,399	2,409
Jawar and bajra	63,931	52,701	44,588	48,977	24,276	187,315	100,528
Oats	631	1,364	834	1,910	302	19,424	18,016
Pulse	28,823	34,107	12,302	19,226	33,315	149,994	90,928
Rice in the husk	8,969	44,953	34,855	3,455	1,037	23,029	24,231
„ not in the husk	7,069	5,960	117,206	49,570	10,856	622,890	678,387
„ flour	50	59	23	16	5	14	120
Wheat	273,663	52,161	111,654	231,359	96,493	610,792	46,325
„ flour	12,796	12,840	10,829	11,272	10,477	31,492	28,586
Other sorts	40,579	69,886	37,268	48,068	40,410	123,404	40,922
Total ...	470,292	337,921	391,150	429,929	246,256	1,911,201	1,072,413
	Exports.						
Barley	11,098	54,170	12,774	41,036	22,337	26,956	34,471
Gram	289,918	348,495	346,302	532,458	406,869	214,490	206,966
Jawar and bajra ...	1,227,261	695,714	810,932	872,434	887,059	141,147	642,446
Oats	76,300	96,834	60,741	74,994	105,213	66,485	50,992
Pulse	563,617	682,573	679,420	541,230	764,306	290,771	306,033
Rice in the husk	425,140	644,989	626,235	605,776	483,780	403,426	474,564
„ not in the husk	28,772,128	28,706,568	26,786,085	33,685,054	32,031,328	23,557,261	26,272,097
„ Flour	2,678	8,130	2,190	2,407	447	1,402	1,002
Wheat	22,972,603	10,188,585	9,176,537	11,041,621	3,486,964	383,511	2,393,597
„ flour	557,154	563,956	581,783	609,156	723,255	475,232	505,303
Other sorts	138,771	250,376	158,292	506,671	131,337	6,607	4,704
Total ...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30,801,215

Provincial average monthly wages (in Rupees) of skilled and unskilled labour from 1881 to 1896.

Provincial average monthly wages (in Rupees) of

Province.	1881.			1882.			1883.		
	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.
Burma	13·17	12·14	27·14	12·92	12·93	31·71	16·83	12·83	28·75
Assam	7·62	8	19·12	8·19	8·12	23	7·14	7·62	18·62
Bengal	5·63	5·23	9·57	5·73	5·47	9·87	5·89	5·52	10·19
North-Western Provinces	4·11	4·61	8·77	3·92	4·47	9·03	3·84	4·5	8·11
Oudh	3·09	4·42	7·71	2·94	4·25	7·81	2·78	4·25	7·81
unjab	6·29	6·54	14·73	6·29	6·46	13·84	6·29	6·46	14·65
Sindh	8·23	8·75	25·04	10·5	9	26·25	10·5	9·5	28·75
Bombay	7·43	8	20·61	8·18	8	22·05	7·35	8·64	22·09
Central Provinces	4·33	6	15	4·67	6	15	4·33	5·67	16·17
Berar	7	7·5	15	7	7·5	15	7·5	7	22·5
Madras	4·02	5·65	13·24	4·32	5·62	13·82	4·29	5·55	13·73

skilled and unskilled labour from 1881 to 1896.

1884.			1885.			1886.			1887.			1888.		
Able-bodied agricultural labourer.	Syce or horse keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.
15·11	12·92	32·5	15·64	12·64	35·36	16·29	13·14	31·07	16·25	13·19	31·87	15	12·87	28·44
7·5	8·75	19·5	6·87	7·75	21·5	6·5	7·5	22·62	6·62	7·5	20·94	7	7·62	22·62
5·7	5·82	10·2	6·04	5·48	10·28	6·13	5·48	10·21	6·31	5·45	10·6	6·16	5·82	10·58
3·87	4·5	8·31	4·09	4·75	9·53	4·16	4·69	9·3	4·37	4·75	9·58	4·44	4·75	9·16
2·94	4·25	7·81	3·1	4·33	8·25	3·16	4·25	8·51	3·19	4·25	8·58	3·52	4·25	8·75
6·12	6·29	14·81	6·23	6·29	15·92	6·52	6·05	14·41	6·85	6·5	15·87	6·6	6·33	15·74
10·75	10	28·75	9·75	10 75	32·5	9·75	10·75	30·75	12	1[illegible]·75	31·25	12·5	10·75	31·5
8·17	8·79	23·07	7·79	9	22·41	7·71	8·64	24·07	7·64	8·79	23·82	7·58	8·39	22·26
4·33	5·67	16	4·17	5·33	12·17	4·17	5·33	12·83	3·92	5 83	12·92	4·17	5·5	14·17
7·5	7	22·5	7	7	22·5	7·5	7	22·5	6	7	15	6	7 5	15 to 30
4·66	5·69	13·62	4·58	5·64	14·08	4·33	5·94	14	4·76	5·98	13·38	4·84	5·87	13·56

Provincial average monthly wages (in Rupees) of

Province.	1889.			1890.			1891.		
	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.
Burma	16·75	13·37	28·25	15·44	13·62	28·31	14·73	14·09	25·27
Assam	6·62	8	23·5	7·37	8·37	25·5	7·62	8·62	25·37
Bengal	6·49	5·65	10·69	6·51	5·77	11·5	6·13	5·52	11·41
North-Western Provinces	4·38	4·75	10·12	4·38	4·74	9·28	4·47	4·75	10·25
Oudh	3·52	4·25	9·06	3·52	4·25	9·06	3·52	4·25	9·68
Punjab	6·44	6·35	16·38	6·35	6·11	17·29	6·35	6·11	15·39
Sindh	12	10·75	31·25	13	11·75	30	14	10·75	29·75
Bombay	7·52	8·21	22·06	7·57	8·36	21·29	7·5	8·36	21·36
Central Provinces	3·83	5·33	13·17	3·83	5·17	11·67	4·33	5·17	13·33
Berar	8	8	21	6·87	7	24·37	7·5	7	22
Madras	4·98	5·91	13·78	4·95	5·82	13·37	5·09	5·9	13·92

skilled and unskilled labour from 1881 to 1896—contd.

1892.			1893.			1894.			1895.			1896.		
Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Syce or horse-keeper.	Common mason, carpenter or blacksmith.
14·77	14·27	27·14	14·23	13·91	25	13·59	14·05	26·59	13·91	13·5	25·77	14	14·23	27·36
7·87	8·5	22·75	7·62	9·12	24·75	7·62	8·75	24·37	7·5	9·12	25·62	7·75	9·12	25·5
5·75	5·52	11·79	6·1	5·83	11·57	6·35	5·88	11·54	6·48	6·3	12·12	6·9	6·58	11·38
4·28	4·9	10·18	4·59	4·9	10·12	4·81	5·19	10·3	4·87	5·19	10·42	4·06	4·89	9·16
3·19	4·33	8·89	3·52	4·5	9·68	3·52	4·5	9·73	3·52	4·5	9·68	3·2	4	7·5
6·85	6·2	17·11	6·6	6·2	16·51	6·83	6·2	16·24	6·7	6·23	16·82	7·03	6·61	17·02
11·5	10	31·25	11	10·75	30	14·5	11·25	34·25	12·75	10·5	33·75	13·5	11·25	28·75
7·38	8·44	20·53	7·83	8·53	22·37	8·03	8·21	22·3	8·18	9·57	23·2	7·38	8·26	22·2
4·67	6·33	13	4·71	6	14·67	4·5	6·33	15·83	3·83	6·17	12·44	4·17	6·17	12·83
6·87	7	24	7·75	7·75	23·25	7·5	6·56	21·25	7·5	6·56	22·5	5·62	5·62	20
5·23	6·11	14·47	5·22	6·18	14·57	5·16	6·18	14·53	5·05	6·18	14·53	5·15	6·05	13·97

Average monthly wages (in Rupees) of skilled and unskilled labour in certain

Quinquennial period.	Calcutta.	Patna.		Rangpur.		Backergunj.	
	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.
1881—1885	12·6	3·75	6·79	7·5	12 to 15	7·5	8 to 15
1886—1890	15·5	4·55	7·2	7·35	13·6	7·7	12·8
1891—1895	15·3	4 to 5	6·9	6·9	22	7·8	12·3
The year 1896	15 to 16	4 to 5	7 to 8	7·5	15	10 to 15	8 to 15

Average monthly wages (in Rupees) of skilled and unskilled labour in certain

Quinquennial period.	Rawalpindi.		Karachi.		Belgaum.		Ahmednagar.	
	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter of blacksmith.
1881—1885 ...	8	12·75	11·29	27·11	6·6	18·39	6·6	16·95
1886—1890 ...	6·39	14·22	15·1	30 to 40	6·45	17·39	7·5	22·62
1891—1895 ...	6·52	22·78	14·5	32	6·8	16·53	7·7	21·22
The year 1896 ...	6·56	21·87	10 to 20	25 to 35	6·69	13·94	4 to 5	12 to 30

selected stations for quinquennial periods from 1881 to 1896.

Cawnpore.		Fyzabad.		Meerut.		Delhi.		Amritsar.	
Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.
3·8	8·55	2·81	8·32	5·1	9·2	5·12	10·61	6	12·79
4·09	10	2·81	7·5 to 9·37	5·5	11·2	5·79	12·51	6·62	14·39
4·2	8·54	2·81	7·5 to 9·37	5·5	12	6	12·25	7	14·5
3·28 and 3·75	7·5 and 9·37	1·87 to 3·75	7·5	4·33	10	5·62	12·75	8	15

selected stations for quinquennial periods from 1881 to 1896—contd.

Bombay.		Ahmedabad.		Jubbulpore.		Nagpur.		Raipur.	
Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.
10·57	38·97	7·39	24	4·6	14·8	4·39	14·4	4·1	15·39
10·18	38·53	7·5	21·25	3·6	12	4·2	15	4·15	11·85
11	27·5 to 42	6·7	18·75	3·8	12·47	4·4	15	5·02	14·1
11	27·5 to 42	7	22·5	3·5	10	4	15	5	12 to 15

Average monthly wages (in Rupees) of skilled and unskilled labour in certain selected stations for quinquennial periods from 1881 to 1896—concld.

Quinquennial period.	Bellary.		Madras.		Salem.		Rangoon.		Toungoo.	
	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.	Able-bodied agricultural labourer.	Common mason, carpenter or blacksmith.
1881—1885 ...	4·09	14·29	5	13·59	2·3	14·69	17·2	30	11·25	37·5
1885—1890 ...	5·05	15	5·5	13·64	3·53	13·72	15·2	31·5	13·8	42
1891—1895 ...	6·06	19·12	6	14·47	3·68	12·03	13·8	31·5	14·2	29
The year 1896 ...	6·25	15	6	13 to 16	3·83	11·67 to 12·67	15	45	14	30

Written answers to the Commission's questions by Mr. A. T. A. Shaw, Deputy Commissioner, Meiktila.

57. (i) Five village tanks were started as test works at the beginning of the famine in Wandwin Township, Meiktila District. Owing to want of proper supervision by Public Works Department officers, large numbers from neighbouring villages crowded on to the works, but they showed in what villages the distress was most acute, and the workers were soon drafted to Meiktila-Myingyan Railway relief work. I consider therefore that they were useful as test works, but not otherwise.

(ii) One out of the five tanks was found most useful as supplying water to drink for both the villagers and their cattle, as the supply had been scanty before. The other four tanks are irrigation tanks. Owing to the rainfall being local in scanty years, it is difficult to say whether the tanks will be useful or not without an experience of several years.

71. (*a*) From 3 to 5 miles.

(*b*) 50 miles, without being conveyed by railway or steamer. People from Meiktila went to Kuma tank in Myingyan district, a distance of about 50 miles, in preference to going to Mandalay by train.

72. Yes. Able-bodied labourers migrated mostly to Lower Burma.

73. Yes. Provided that the place to which they were conveyed was healthy and ample accommodation was provided for them there, and they were properly looked after ; but my experience is that people were most unwilling to be conveyed by railway or steamer and the few daring ones that went returned with several complaints which prevented others going.

74. It has been the rule.

75. Residence was not obligatory, but people who came from long distances lived most willingly on the works.

76. I am in favour of concentrating the works. Residence was not made obligatory and yet very few persons not requiring relief came on to the works. A high task and a low rate are, I think, sufficient.

77. No objection was ever offered that I know of to residence on the works.

78. I think the scattering of works most objectionable, and I should say that the disposable establishments would not be sufficient.

79. No reduction of the task was made in Meiktila district for such reasons.

80. The minutes of the Famine Conference will show this.

81. No.

82. Blankets and bedding were provided for the sick in hospital only.

83. No small works were in progress, so I cannot say.

No answers to questions 84 to 93 given, as I had no experience of piece-work in Meiktila district.

94 & 95. The minutes of the Famine Conference answer these questions.

96. Wages varied in Meiktila district with the value of rice where there was any substantial rise or fall for any lengthened period, but were altered as seldom as possible. I do not think any other system necessary.

96A. Men and women of the same class were differentially tasked and paid, and I think this system a good one.

97. The Famine Conference decided this point.

98. Seven years.

99. I think a fine in proportion to the amount of task left undone is the best penalty, such fines being imposed after considering all the circumstances.

100. I think the officer in charge of the camp should be given discretion to fix a wage lower than the minimum wage when work has been scamped through sheer laziness.

101. No.

102. No; I would not allow labourers to earn more than the maximum wage.

103. One-sixth of the Sunday wage should be added to each week-day wage, and there should be a day's rest on Sunday. The officer in charge of the camp should be given the discretion of paying a minimum wage for Sunday to relief workers arriving on Saturday evening or Sunday if they are manifestly starving.

113. A very large number of adult males found employment in Lower Burma at wages exceeding the famine wage. I think it was incumbent on the Government to provide employment for their families on relief works.

114. Public Works Department officers had the whole management during the late famine in Meiktila district, and I think this the best arrangement.

115. I, as Collector, found very little cause of interference with the Executive Engineer, Famine Works Division, who practically managed all the relief works. I informed him of the changes in the value of rice and got him to adjust wages accordingly, and I helped him occasionally in getting relief workers drafted and eatables supplied on the works, but apart from this he managed everything and I think this the best plan.

116. The Collector should be held responsible that all who are in want of work get it and that market supplies are forthcoming; while the Executive Engineer should be held responsible for the professional part of the work, that proper tasks are set, payments are made in accordance with work done, and should control hospital and sanitary arrangements.

117. Assistants should, I think, report matters for the Collector's orders and not have any of the Collector's powers delegated to them.

118. Assistant and Executive Engineers were in charge of all relief camps under the general control of the Executive Engineer, Famine Works Division. All relief workers knew that the Engineer's orders were final in most matters and consequently did better work probably than they otherwise would have done.

119. I think Public Works Department officers should be themselves in charge. Junior civil officers were attached to the camps in this district and, without being subordinate to the Public Works Department officers, helped them greatly in their duties, as well as keeping the Collector informed of all that took place.

120. I think Public Works Department officers should, if possible, control all arrangements, but certainly the payment of labour in all cases, the conservancy, kitchen and bazar arrangements might be delegated to civil officers, if the Public Works Department officers could not manage them.

121. I think civil officers attached to camps should have magisterial powers and try all offences which occur in the camp.

122. All the works were under Public Works Department agency.

123. See answer above.

124. (i) Bi-weekly, except at the commencement of the famine when daily payments are necessary.

(ii) I have no experience of piece-work.

125. When payments are made bi-weekly they work out in pice. Pies are not current and should not be paid.

126. Itinerary payments were made by independent cashiers, and I think this the best arrangement.

127. There was no such practice in Meiktila.

128. No aboriginal hill tribes came on to the works.

129. 6,000 is I think a good maximum number. Camps should be amalgamated to come as near the maximum as possible. I cannot think of any special minimum.

130. We had no kitchens in Burma. I recommend cash-doles in all cases.

131. The Public Works Department officers can answer this. I cannot.

132. I think the returns prescribed by the Famine Code suitable and have no suggestions to make.

133 & 134. No complaints received.

135. I know of no such employers.

136. I heard of no sweating in labour.

137. Such difficulties did not arise, so I have no suggestions to make.

138. I heard of tanks being dug by private employers to give work to their villagers who were not necessarily professional earth-workers.

139. I do not think this would be necessary in Burma.

149. Yes.

150. Those receiving gratuitous relief were the old and infirm incapable of doing any work and who had no relatives to support them.

151. The village supports these people in ordinary years.

152. Very few children were given gratuitous relief. There were more women than men receiving it. The "pardanashin" is not known in Burma.

153. Such persons are known as "dokitas." Their numbers for each tract can be ascertained from the "thathameda" assessment roll. The numbers would increase with the severity of distress.

154. Yes.

155. I do not think it necessary to compel these persons to go on to the relief works. They are sometimes left behind to guard the homes of the able-bodied.

156. No.

157. Yes.

158. The inspection organization was strong enough, as it was well-known in the village what persons should get gratuitous relief and what should not.

159. No; because the numbers granted gratuitous relief are not large and lists are easily made out.

160. No.

161. The late famine was pretty general over the whole of Meiktila district, and it was difficult to encourage private charity, but the people did what they could. I do not think that the gratuitous relief distributed had any demoralizing effect.

162. Those granted gratuitous relief were mostly incapable of work of any kind.

163. I do not think it was necessary to provide such work, nor would it have benefited the village or Government.

164. We had no kitchens in Burma, and I do not think they are required.

165. There are no such caste feelings in Burma.

166. Kitchens are not required.

167. Money doles were given. Food-grain was procured in local bazars pretty easily, so I think the money dole the best.

168. It was given in the actual houses of the people.

169. Complaints of malversation by local officers were received in a few cases, but it always turned out that they were only miscalculations as to the amounts to be paid.

170. Revenue-Collectors called "thugyis" were appointed "local officers." They made out lists which were checked by the Myook or Township Officer. One clerk and one myothugyi were appointed inspectors in addition to the ordinary village establishment.

171. Not at all.

200. No such money was advanced.

201. Sums up to Rs. 5 were distributed to several poor cultivators for the purchase of seed, both out of the Famine Fund money and as advances from Government. Such distributions were of great benefit to the cultivators.

202. Such advances are to be repaid in two years, but the time will have to be extended if the seasons continue unfavourable.

203. No.

204. I do not think subsistence advances necessary.

205. I think it is more economical, because cultivators have a greater chance of setting themselves up again when they get help in growing their crops.

206. Only such cultivators as could make good use of their money were given advances. Those who had no lands were obliged to go on to the relief works.

215. The private indebtedness of the land-owning class has undoubtedly increased, but was checked by people having no money to lend, and professional money-lenders not thinking the security good enough. I should say that ultimate ruin was caused in a very few cases. The stamp and registration receipts have not increased, but rather diminished.

222. I have not the reference by me, so cannot offer any suggestions, but I think that the relief under the four heads noted in the circular was most suitable.

223. The bulk of the Famine Fund money distributed in Meiktila was on object IV, granting doles of Rs. 5 to poor cultivators to buy seed and grow crops. Under head I money was spent on buying clothes and blankets for the poor. Neither of these objects trenches upon the field of Government relief operations. A small sum of money was spent on sending relief workers from Meiktila to Mandalay, when work at the latter place, but not under the Famine Code, was opened for them, and also on buying food for a cholera-stricken village when the villagers were not admitted to other villages to buy food. These objects trenched somewhat on Government relief operations, but they were exceptional, and a very small sum of money was spent on them.

224. No money was spent on object II.

225. Orphans were mostly taken charge of by fellow-villagers, and no money was spent on them specifically.

226. A very small sum was spent on object III. I have no suggestions to make.

227. This was not found necessary in Burma.

228. No such shops were started.

229. See above.

230. Help was given to agriculturists long before distress subsided, just before the commencement of the agricultural season, and I think was of great help to them. Agricultural operations went on with relief works with advantage to both.

231. Landowners who have cattle or can borrow them. There is a large stock of cattle in Meiktila district and I refused to grant advances for purchases of cattle.

232. It was poor cultivators who could not give security to whom money from the Famine Fund was chiefly given. I think the Charity Fund should help only poor cultivators and not those who can get statutory loans.

233. I think it was best not to give subsistence allowances to such agriculturists who could get taccavi advances.

234. I think they have served a very useful purpose chiefly in the encouragement of growing of crops as in an ordinary year by helping agriculturists with what they required. Many more would have migrated otherwise, and it would have taken them several years probably to come back and settle again.

235. Over Rs. 90,000 out of Rs. 1,06,000 was spent on giving dales of Rs. 5 to poor cultivators.

236. The Famine Fund report gives all details.

237. Object IV.

238. Under Rs. 300 was spent on object III.

239. Yes. The people were most benefited in that way.

240. Yes. No permanent benefit to agriculture has resulted, but the people have been saved from being thrown back.

241. It is difficult to form an accurate estimate, but I should say that 40,000 acres have been cropped with various crops which would otherwise have been left fallow.

257. I think the measures of State relief were most effective. Great credit is due to all Engineers in charge of famine relief camps and to the Executive Engineer, Famine

Works Division, for the pains they took over all sanitary arrangements and protecting pure water against contamination.

273. "Pyaung" or "jowar" is mostly consumed in the west of the district, and in Mahlaing township especially where it is largely grown. Rice is consumed in the paddy tracts to the east.

274. They eat two meals a day. The food consists principally of the food-grain with vegetables and curry. Water is generally drunk.

275. Oil-cake on which cattle are fed is largely mixed when the food-grain gets scarce.

276. Oil-cake is the most palatable; roots, etc., the least so.

277. They eat a grain called "lu" occasionally; it is a sort of millet. They would not object to other grains if procurable.

278. Rice was the principal food-grain on the relief works.

279. There were no poor-houses or kitchens.

280 & 281. See above.

282. Not having been stationed in India, I cannot say.

283. The depreciation of the rupee has had no effect in Burma on the price of food-grain so far as I know.

283A. There was very little difference in prices in neighbouring districts.

284. Traders were active in selling grain.

285. They bought at the ordinary rates.

286. Yes.

287. There was no export.

288. No fortunes were made.

289. The grain godowns were periodically depleted.

290. There was no surplus of private stocks.

291. Relief workers occasionally bought rice in their own villages somewhat cheaper than the market prevailing at the relief works.

292. There were no wholesale dealers in Meiktila to speak of. Those who bought wholesale sold the grain retail themselves.

293. There has been no change of habit in storing food-grains.

294. There were no crops to export. Private trade is ready to import freely when prices go up.

295. There were large numbers of land-holders and under-tenants on the relief works.

296. Agriculturists chiefly.

297. The people had no means to buy food-grain. Non-agricultural as well as agricultural employment fell off.

298. Wages of no class went up as all were equally badly off.

299. I have not noticed any great reduction.

300. The people seemed to me to resist famine better than in 1891-92 when I was in Myingyan district, but this famine was more prolonged than that one.

301. The Burmese people have never shown reluctance to go to relief works unless they could find something more paying to do.

302. Cattle were largely sold, but not jewelry or brass pots.

303. Prices were as low as could be desired. No bounties or loans were necessary.

304. I am stationed in Burma.

305. I have no knowledge on this question.

Written answers to the Commission's questions by Mr. D. Norton, C.S.I., Commissioner, Meiktila.

57. (i) When famine prevails relief works should be large and village tanks should only be used (*a*) in case of epidemics and (*b*) as depôts from which to draft the labourers to large works.

(ii) Village tanks are useless in years of really short rainfall, but they are useful in ordinary years and in those numerous years in which the rainfall is not very short, but is only badly distributed. During the recent famine even the largest village tanks, made during the preceding famine of 1891-92, were dry for several months.

71. (*a*) About 4 (four) miles.

(*b*) About 50 (fifty) miles.

Reply (*b*) presumes that the locality of the relief work is healthy. Again relief workers from the dry zone could be induced to go southwards to Lower Burma for 300 or 400 miles, but they have a great horror of the feverish districts to the north-north-east and north-west of them.

72. Yes.

73. Most certainly: provided that the locality is not feverish and that the relief labourers and their dependants are drafted home again and given a few rupees per household at parting.

74 & 75. It has been the rule, but it was not a definite condition of relief and resulted incidentally, as only large relief works were tackled when the famine had declared itself beyond doubt.

76. (*a*) Concentration of works is best. (*b*) Small village works attracted some who could have survived without them. (*c*) Yes.

77. (*a*) No. (*b*) No. (*c*) At first the people did not like camp disciplineand sanitation, but they soon grew used to measures that were explained to them by officers in whom they had confidence.

78. The position here contemplated would be absolutely unworkable and would mean wholesale waste of public money without adequate advantages.

79. Nothing of this kind was attempted. It would have been quite unnecessary and open to the gravest abuses.

80. Please see history of famine.

81. No. Health was better on the relief works than in the surrounding villages.

82. No; except in hospitals for the sick.

83. Our works were all large works.

84. In the Meiktila Division there was only task-work. In Mandalay a piece-work camp was opened as an experiment just as good rain fell and the famine closed; it had not a fair trial.

85. I do not know yet, but it can scarcely prove better or cheaper than our task-work has proved.

86. Piece-work should not be prohibited in the revised Famine Code and the Commissioner should be able to order its introduction instead or in lieu of task-work.

87. Administrative expedients to prevent piece-work from degenerating into a system of sweating in earth-work must be almost, if not quite, as expensive as those needed for task-work. Except the skilled earth-workers, who can always take care of themselves in Burma, the people prefer task-work to piece-work.

88. Weak or incompetent workers could not be induced to migrate to the piece-work camp.

89. Yes. For arrangements proposed please see Meiktila Famine Conference report. But any such arrangements are almost, if not quite, as expensive as task-work and not quite so effective in getting rid of experts who can migrate to Lower Burma.

90. Regarding piece-work I do not know. For task-work the gangs should range from 25 to 75 and the village system should be regarded.

91. (*a*) Yes: provided that there are bi-weekly peripatetic payments along the borrowpits to the headmen in presence of the relief workers.

(*b*) Not very uncommon indeed.

92. No. The piece-work experiment in Mandalay was expensive, but then it had not a fair trial.

93. Piece-work would draw able-bodied experts and keep away the weak and inefficient, so that these latter would soon swell the numbers on gratuitous village relief.

94. Please see Conference report.

95. Ditto; where all this is worked out in full detail.

96. Was not found to be necessary during recent famine.

96A. Men and women should be tasked and paid differently; see Conference report.

97. See Conference report, where full details are printed.

98. } Ditto.
99. }

100. Yes.

101. No. The numbers on D wages were few and they had usually others to help them.

102. Cash margins should be paid or otherwise at the discretion of the Commissioner, but nothing more seems necessary with full tasks.

103. There should be no Sunday wage, but it should be distributed over the other six days.

113. (*a*) Yes: migration of able-bodied males to Lower Burma.

(*b*) Yes: in Lower Burma and elsewhere. Local wages when available were always in excess of famine wages.

(*c*) Yes: in default of a national burying club. In other words, the strong had to leave some but not all of the weak, and it was economical to the State that all the members of distressed families did not need relief.

114. All relief works, not even excluding test works, should be carried out by Public Works officers.

115. Mr. Higham's suggestions on this point seem good, but the authority of the Commissioner should be absolute (subject of course to usual control) and the Collector's attitude should be one of responsibility and not of criticism.

116. There must continue to be joint responsibility for many things or most things not purely professional: measurements, and soil classification and such like would rest with the Executive Engineer, but the Collector should be able to say (subject to the Commissioner's control) whether tasks were too severe or otherwise. The Commissioner and Superintending Engineer may always be trusted to work together, and at any rate their differences, if any, could be referred for orders under existing standing orders. During the recent famine personal conferences were found invaluable and reduced friction to a minimum.

117. Certainly not. The Collector's assistants should be his eyes and ears, but nothing more as regards the Public Works Department.

118. Officers in charge of relief work camps, which should be large, should always be gazetted or at any rate pensionable Public Works Department officers.

119. Yes. Civil officers should help the officers in charge and be in fact their Civil A. D. C. They at the same time send diaries to their Collectors who submit them to the Commissioner.

120. Yes: but these non-professional details can be done for them and under their orders by the civil officers.

121. The officer in charge should not be a Magistrate, but the civil officer who helps him and investigates complaints for him should be one and should know the language of the people thoroughly.

122. No. Civil agency works were either closed gradually or taken over by the Public Works Department as soon as the famine declared itself as established.

123. The test works might with advantage have been managed by the Public Works Department from the very beginning. Their management by civil officers was fair to good, but current work suffered for a few weeks.

124. Bi-weekly for both (i) and (ii).

125. The ready reckoner should be in *pies*, but bi-weekly payments should be to the nearest *pice*. *Pies* are not current in Burma.

126. By cashiers in the manner set out in the Meiktila Conference report.

127. See Mr. Watson's rules annexed to the report of the Meiktila Conference. Civil officers as a rule received all new comers, but others who wished to join old gangs were allowed to do so, but then they began on full tasks and did not get the new-comers' wage. This worked well.

128. *Nil.*

129. See Conference report.

130. This subject is fully dealt with in Conference report.

131. See history of famine.

Famine work must ordinarily cost at least 30 per cent. more than contract work in a normal year. But this ratio cannot be fixed, as it varies not only with the price of the staple food-grain but also with the number of males on the works and the size of the works. Women and children are costly workers.

132. These are all embodied in the Meiktila Conference report.

133. None.

134. There were some rumours on this subject, but investigation found them without foundation. In other words petty contractors, *who paid their coolies*, could always get them, but some were grasping and greedy, and three failed to pay their unfortunate people at all and were naturally deserted by their half-starved followers.

135. Wages paid by such employers were below normal wages in ordinary years, and they were in excess of famine wages. But famine wages were paid regularly, and people on the brink of starvation and without credit could not fill themselves on promised wages. Even now wages throughout the famine areas are well below normal.

136. Rates promised were sufficient, but they were sometimes irregularly paid and coolies had to live from hand to mouth.

137. None other than the exaction of full task for famine wages, as in the late famine.

138. A few tanks were dug or pagodas built by good Buddhists anxious to earn merit by the relief of distress. But these only helped hundreds where thousands were distressed.

139. No. At any rate not directly. But much can be done and was done by facilitating migration in many ways. For example taxes on carts and men going to Lower Burma were remitted; the places and conditions on which work was available were published; and the railways and steamers were induced to provide extra accommodation at reduced fares.

148. See figures in history of famine not now before me.

149. Persons so relieved were mainly those incapable unfortunates whose existence in normal seasons depends on private charity. They were friendless sick and blind of the poorest agricultural villages.

150. Yes. Indeed in Myingyan, although there were no deaths from starvation, the numbers on gratuitous relief might well have been somewhat larger than they were.

151. During the famine the people who supported these narrowly escaped starvation themselves either by migrating to Lower Burma or to the relief works.

152. There are no "pardanashin" women with us. I do not remember the sexes.

153. (*a*) No, as much depends on sickness and sore eyes and these vary from year to year. (*b*) Yes.

154. No: not safely.

155. No. Relief works are better without too many diseased and incapable dependants. At any rate Burmans without any executive pressure look after their dependants as long as they can possibly do so.

156. Each case should be decided on its own merits.

157. It was popular, but strict supervision checked and prevented abuses.

158. Yes. See famine history. Diaries reached the Commissioner weekly and much use was made of these.

159. No. But perhaps I don't understand this question. Nothing can be done well without adequate supervision.

160. There is no caste, but social influence on this point in Burma would be strong and on the right side.

161. No. Nothing could be more admirable than the way in which Burmans helped each other in distress.

162. No. Gratuitous relief stopped directly those in receipt of it were fit for work and could be sent to a relief camp.

163. No.

164. See report of the Meiktila Conference. Kitchens in Burma would be popular, expensive and dangerous.

165. It would be the national form of feasting and would draw diseased crowds of dependants away from their natural guardians to the kitchens of the State. It would weaken the village system and be altogether dangerous and objectionable.

166. There is no sentimental difficulty, but the reverse.

167. Cash; and cash is the best for Burma.

168. In the villages by their patriarchal headmen.

169. (*a*) Cases of malversation or extortion were extraordinarily rare, but I remember two in which the delinquents were promptly punished. (*b*) No.

170. The village system was made full use of and it was only supplemented by the appointment of a few additional Circle Inspectors to help the Township Officers.

171. Not at all, except as regards the collection and verification of information.

200. Advances were for seed-grain and cattle and not for land improvements.

201. (*a*) Yes; but much of the seed for the early crops failed. (*b*) It is difficult to say, but I think not.

202. Two and three years, subject to extensions of time which are readily granted up to a period of five years, on good cause shown.

203. No. But it is certain that a little seed-grain found its way into the stomachs and not into the fields of the people.

204. I have had no experience of such subsistence advances except from private charity.

205. No, provided that useful large works and not useless little ones are undertaken.

206. Government loans are not very popular among those cultivators who can furnish security (personal or otherwise) and to give out these loans otherwise than on good security would be both wasteful and degrading to the people. In other words, the State cannot deal with individual cultivators who are unable to furnish substantial security and the joint security system works well, because the people and their village officers know the good and exclude the bad and thriftless cultivators. For example ten men and a headman come forward, on their joint and several bond, to borrow money for seed-grain. The Township and Subdivisional Officers know personally that two or three of these are good cultivators, and they may take it almost for granted that the others are not men of straw likely to abscond without repaying their share of the loan.

215. No, but I know that indebtedness has increased considerably in tracts where crops of sesamum and cotton can be grown. The answer to the second part of this question is also "no." Regarding the third sub-question it would seem, for the present at any rate, to be the money-lenders who are likely to be ruined. Money has, however, been very tight during the famine and in many places holdings which could neither be sold nor mortgaged were simply abandoned till better times when they will be re-occupied.

222. No.

223. No.

224. Yes.

225. No. Orphans may almost be left out of account after famine is over.

226. No.

227. No. Any interference with private trade does more harm than good.

228. There were no such shops and none were needed in the Meiktila Division.

229. No.

230. Nothing can be done on a large scale just in a minute or all over an enormous area just at a given time. Again distress cannot be at its height just before the commencement of the agricultural season. The selection of the fitting time may and must be left to local experts in agriculture guided by their Collector.

231. Generally those who can do something to help themselves or those whose position is not hopeless; but where, as in Upper Burma, the village system is strong, help is likely to benefit the whole village community.

232. Yes. Government cannot grant loans for subsistence or for fodder, and cultivators and their cattle must eat or they cannot plough.

233. Yes.

234. Yes: not only in the ways intended but also in convincing the Upper Burmans that we mean well by them and that we are something better than mere Collectors of taxes.

235 & 236. Has been fully reported on and does not admit of brevity.

Clothes and advances for seed-grain were the most popular and useful forms of charitable relief.

239. Yes.

240. Yes.

241. No; and if I could, the answer would be inadequate and misleading to explain. It was known that large sums of money would be given out at the right time for the purchase of seed-grain and this knowledge encouraged dealers to import seed-grain beforehand and while there was yet time in large quantities into the famine-stricken districts. The enormous benefit of this movement to all cultivators and not merely to those who actually received doles of money cannot be overestimated.

242. For the most part private charity dealt with these. Their numbers were few, because of the almost wholesale migration to Lower Burma and of the timely opening of large and well-known relief works. Roads were patrolled by the police, and headmen looked after migrants and facilitated them on their way southwards or to the nearest relief camp.

243. There was practically no objectless or aimless wandering of gangs. Those who left their villages did so after a certain amount of preparation and with an objective in view.

244. No.

245. Migrants from Shwebo, Sagaing and Magwe passed through the districts of the Meiktila Division on their way to Lower Burma, but they did not wander about aimlessly nor would they have been permitted to do so.

246. All migrants were facilitated southwards and warned of the places where they could find water to drink. Thousands of these carried little bags of oil-cake and trusted to charity for the rest of their food while passing through the desert to the promised land in the south.

247. Nothing more could be done than what was done. The roads were improved and some bridges were strengthened and care was taken to keep halting places and supplies of water pure. The people were most orderly and grateful for help and advice, and they were astonished at the security of life and property which they enjoyed.

257. (i) No; they were adequate. Mortality in the relief camps was the reverse of excessive and the sanitary conditions fell little, if at all, short of perfection.

257. (ii) Yes.

273. Rice, millet, beans, maize and (in seasons of scarcity) sesamum, oil-cake, gram and "lu" are also produced, but in small quantities.

274. Two meals; one between 9 and 10 A.M., and another between 4 and 5 P.M. In addition there is usually a light "tiffin" of cakes or sweets and sometimes a supper. Eatables and drinkables vary enormously from year to year, but in Yamethin and Meiktila rice is the main eatable and other things are added to or mixed with it, while in parts of Myingyan the people are called "millet-eaters" contemptuously.

275. Imported rice fills up deficiencies when the people can afford this food-grain which is their most popular diet. At other times they resort freely to wild yams and other jungle roots, fruits and grasses too numerous to mention. I have often seen the pith of the papita or pepaya tree mixed with rice after it had been chopped up finely and also cutch pods, which are astringent, were said to counteract the laxative effects of sesamum oil-cake.

277. During the late famine imported rice was practically the only food-grain procurable and but for it the people must have perished in multitudes.

278. There were no poor-houses or kitchens. On the relief works milled rice from Rangoon was the chief food-grain, but this was mixed in varying quantities with millets, beans, oil-cake and Indian corn when these were procurable.

279. None such in Burma.

280. Ditto.

281. Ditto.

282. There was no panic and prices were fair and very steady.

283. I do not know.

283A. Please see famine history.

284. They were active and did their duty well.

285. Yes.

286. Yes.

287. Exportation was not noticed.

288. No fortunes have been made in the dry zone.

289. There were practically no local stores and even seed-grains had to be imported by rail and river.

290. No. I have examined many villages for these and found none.

291. Cultivators who got crops in or on the borders of the dry zone received famine prices for them.

292. Yes. In fact Rangoon prices ruled the local markets.

293 & 294. A series of bad years has produced little to store and the railway has facilitated exports as well as imports.

295. See famine history.

296. Poor cultivators and coolies.

297. (*a*) Want of rain and want of employment, (*b*) non-agricultural employment never amounts to much, but it was less than usual as funds (public and private) were short, and there was practically no agricultural employment at all. It was not even necessary to herd the cattle as usual, because there were no crops for them to damage.

298. No wages went down. For instance women (coolies) will now work for 3 annas a day when (before this famine) it used to be hard to hire them at 4 annas. This may not be true of the whole area, but it is so at Meiktila.

299. No; not seriously. Weavers are not numerous in the Meiktila Division, but several of these and some village artizans resorted to the relief works.

300. No.

302. Cattle were largely sold, but the sale of jewelry, of which the people have small store, attracted no attention.

303. No.

304. } Not for this Division.
305. }

Written answers to the Commission's questions by Mr. D. Ross, Deputy Commissioner, Yamethin.

148. Eighty per cent.

149. Yes.

150. Yes.

151. In ordinary years they are supported by private charity. The total failure of crops deprived many of the power to exercise private charity. But if there had been no State aid, I do not think anyone would have been allowed to die of starvation.

153. Mostly women; but all sexes and ages were represented. There is no *pardah nashin* class amongst the native of Burma.

153. The last famine was an acute famine for Burma, and in the area affected I do not think that the number requiring gratuitous relief in their houses is likely to exceed 400 to 500. The number will no doubt vary with the severity and stage of distress.

154. I do not think so. The able-bodied go away to Lower Burma, and the weak are left.

155. Yes.

156. No.

157. Undoubtedly, yes.

158. Yes. But in Burma starvation is unknown. Great hardship might be caused, but I have never heard of actual starvation. Every part of his circle was visited once a month by the Circle Inspector, who verified on the spot the claims to gratuitous relief. His work was in turn checked by myself and the Subdivisional Officer.

159. I have no experience of any other kind of relief.

160. No.

161. Yes. I think so, to some extent.

162. Very few.

163. I think not. Those who could work at all could only do the lightest kinds of work.

167. Money; I prefer money. There was no scarcity of rice in the bazars.

168. Given in the actual homes.

169. No.

170. The services of three Circle Inspectors had to be obtained in addition to the ordinary staff. This was all. Local thugyis did the rest.

171. I take it that the answer to this question ought to include money received from the Indian Charitable Relief Committee. The amount received from all sources was Rs. 49,298-14-0, and the whole of this money was distributed by an unofficial Committee of which, however, I was Chairman.

199. Rs. 49,997-8-0 were advanced for purchase of seed-grain; and Rs. 7,996-14-2 were spent on gratuitous relief.

201. Yes. Yes.

202. Repayable in two annual instalments.

203. No.

204. I disapprove of the principle of subsistance advances. Yes, certainly.

205. Yes. I think so.

206. Great care is at all times needed in giving out advances, but as the seed-grain advances are only given out at the commencement of the rains the people could not remain away from the relief works on the off chance of getting them.

215. I cannot form any opinion as to the extent the private indebtedness of the land-owning classes has been increased owing to the famine. The stamp and registration receipts do not indicate increased borrowing and increased transfers of land. To the best of my belief, lending money on the security of land in the affected tracts is not popular among the money-lending classes in this district, and I do not think there has been much borrowing.

216. No special measures were taken or required, as there are unreserved forests in the vicinity of the affected tract and the people had free access to all the other forests.

219. The following is a list of the kinds of food the people get out of the jungles. I cannot give the English equivalents in all cases:—

(*i*) *Kywe-u.*—Wild Yam.
(*ii*) *Myauk-u.*—Ditto.
(*iii*) *Zayitkaung.*—Ditto.
(*iv*) *Kaukkwe-thi.*—Fruit of Kaukhwe tree.
(*v*) *Kyaswe.*—Root of water lily.
(*vi*) *Lun-thi.*—Fruit of Lun tree.
(*vii*) *Thamon-u.*—Tuber of thamon tree.
(*viii*) *Sabe-thi.*—Fruit of Sabè tree.
(*ix*) *Sha-thi.*—Fruit of cutch tree.
(*x*) *Palan-thi.*—Fruit of palan tree.
(*xi*) *Wa-thi.*—Bamboo seed.
(*xii*) *Myet-thi.*—Grass seed.
(*xiii*) *Hugetpyaw-thi.*—Fruit of wild pélantains.
(*xiv*) *Te-thi.*—Fruits of tè tree.
(*xv*) *Zebyu-thi.*—Wild gooseberry.
(*xvi*) *Thapan-thi.*—Fruit of thapan tree.
(*xvii*) *Nyan-Ywet.*—Leaves of nyan plant.
(*xviii*) *Kazun-nwe.*—Leaves of wild sweet potatoe.
(*xix*) *Hmyit.*—Bamboo shoots.
(*xx*) *Kyo-thi.*—Fruit of kyo tree.

257. The measures of State relief were excellent both in principle and in working. Beyond the organization of some test works and the drafting of famine workers to the Meiktila-Myingyan Railway, my duties were confined to the supervision of gratuitous and charitable relief.

273. Rice is ordinarily used; but when not available in sufficient quantity, it is supplemented by maize and jowar. The summer and winter food is the same.

274. Two meals of rice with some curried vegetable and a little *ngapi* and oil. The only drink is water.

275. Ordinary food-grains are never unprocurable; but when rice is dear, maize and jowar are substituted, because they are always cheaper.

276. Maize is most palatable, and jowar least.

277. Simply that they prefer rice.

278 to 281. No experience.

282. I can only speak for my own province of Burma. There was a very large surplus exported and there was plenty left for all probable contingencies. The high level of prices was probably due to some extent to panic and to speculations, and also, no doubt, to the general failure of crops in India.

283. I am not able to answer this question, but empirical opinion is that the rupee purchases less now than it did twenty years ago.

283A. The difference was merely the cost of transit. The railway runs through the middle of the affected tract.

284. Grain dealers were active, and there was never any difficulty about purchasing food-grains for those who had money.

285. Yes, they could always buy. It was money not grain that was scarce.

286. Yes.

287. No. There were no stocks.

288. No. Not that I have heard of. It was genuine buying to put on market.

289. Stocks were very low at the commencement and were entirely depleted at the end.

90. There were no surplus stocks to speak of, but in the few instances in which such were held, they were disposed of and were not held up.

291. I do not think cultivators who had grain to sell sold it to dealers. They sold it direct to the people and, of course, at market rates; but generally not for cash but so much (generally double) to be repaid after harvest.

292. Yes, I think so.

293. The practice has diminished enormously in this district, due to the more ready demand created by the opening of the railway and the improvident habits of the Burmese.

294. The answer to both questions is, yes.

295. I cannot give exact figures. The only relief given to these classes was (i) agricultural loans, (ii) gratuitous doles from the charitable fund, and (iii) gratuitous relief; but I cannot say what proportion these classes formed of the whole.

296. (i) Agricultural class, (ii) dependents on agriculture, (iii) petty tradesmen and artizans, (iv) dependents on these classes, and (v) poor people of the non-working class.

297. To want of money and inability to earn it. Non-agricultural employment of labour fell off too, but not nearly as much as agricultural employment.

298. I think not. The people were all buyers, or nearly all.

299. I think not.

300. I cannot make such a comparison, as this is the first true famine we have had in Burma.

301 & 302. As above.

303. I think not.

304. This question is intended for India, I think.

305. I should say Siam and Tonquin for rice. So far as Burma is concerned, I think private enterprise may be relied upon to do all that is required.

39. (i) I persuaded the railway administration to grant tickets at half price to people from the affected tract to Lower Burma. In this way 953 persons were assisted out of the district to Lower Burma where work was plentiful and wages good. (ii) Gratuitous relief was commenced on the 15th October 1896, and was continued up to 30th November 1898. A total of 99,729 persons were relieved for one day at a cost of Rs. 7,996-14-2, and the daily average of persons relieved was 285. (iii) 760 persons were drafted by Government agency to the famine relief works on the Meiktila-Myingyan Railway. This is all that was done by the State and was all that was necessary. (iv) Rs. 49,997-8-0 were advanced by Government as loans for the purchase of seed-grain. (v) As regards private relief, the affected tract of this district received altogether Rs. 49,298-14-0 from the Famine Charitable Relief Fund. This money was administered by a Committee composed of myself, one missionary, one Burmese Myook, one advocate, one Government pensioner and two Burmese gentlemen. The greater portion of this money was expended under the ivth object laid down by the Government of India.

40. I was Deputy Commissioner of the district. I was also Chairman to the local Charitable Relief Committee.

41. No. (i) question 39 was not a Code measure.

42. I have described all the measures used. No others were required.

43. None, so far as my experience went.

45. I cannot suggest any improvements or other measures.

46. (i) Large relief works and (ii) gratuitous relief given at their homes to those unable to work or to go to the works. If no local works were available, then the people should be drafted. Assistance should also be given to those desiring to emigrate.

47. No answer.

48. Help to emigration was greatly applauded. So was gratuitous relief in their homes. The only people who did not think much of relief works were the people on them. Many went from this district and after giving them a short trial went away again.

49. Yes; in Burma I should take care to have the relief works as far away as possible from the affected tracts. I think that relief works tend to permanently pauperize the people inasmuch as they offer no incentive to thrift or industry, and prevent the people from going abroad in search of fortune. I should do everything possible to promote emigration to the rich districts of Lower Burma where work could be obtained and where there is plenty of good land waiting to be reclaimed from the jungle. I think if emigration were carefully promoted, all that would be necessary for Government to do would be the administration of gratuitous relief in a somewhat extended form.

Written answers to the Commission's questions by Mr. H. F. P. Hall, Assistant Commissioner.

39. State relief measures were—

(1) Remission of taxes.

(2) Public Works.

(3) Gratuitous relief.

(4) Agricultural loans.

Private relief measures were—

(1) Clothing to the destitute.

(2) Passages to labourers to go to places where work was obtainable.

(3) Relief of poor respectable people who could not come on to the works.

(4) Gifts of seed money.

40. I was in charge of the Myingyan Sub-division, where the famine was severest and where the largest camps were situated from October 1896 to August 1897. I myself started two of the camps, and I visited them frequently thereafter. I selected villages for the receipt of agricultural loans and paid the money personally. I did the same with the Indian Famine Charitable Relief Fund money. I assessed the amounts at which taxation could be imposed.

In August 1897 I was on special duty throughout all the affected districts. In December I was Secretary to the Conference that met at Meiktila, and in January and February 1898 I wrote the Historical Famine Report of the Province.

42. It was not necessary to establish grain reserves, soup kitchens or poor-houses.

43. No material departures were made. Minor alterations were frequently found advisable. All this will be found in the report of the Famine Conference held at Meiktila, of which a copy has, no doubt, been sent to the Famine Commission. I agree to all that is contained in this report.

44. Each measure is useful in its own way. They do not compete, but are complementary. Comparison is therefore impossible.

45. I have nothing to add to the recommendation contained in the report of the Conference. Certain measures, such as the establishment of cattle fairs, might be taken to generally promote the prosperity of the districts. But as regards dealing with the famine when it has declared itself, I have nothing more to suggest. All emergencies were satisfactorily met.

46 & 47. *Nil.*

48. All were understood and approved. Of course what caused the greatest gratitude and surprise was the gifts of seed money from the Indian Famine Charitable Relief Fund. After the famine had been declared two or three months, the whole system of relief became thoroughly understood everywhere. I never heard from a Burman any criticism of it, except a very favourable one. Perhaps an exception may be made as regards the substitution of piece-work for task-work. That was universally condemned both by the better classes and by the workers themselves.

49. No.

57. I think they are totally unsuitable. The objections are numerous. Many people come on to them that have no business there and who would not go to a distance. The proportion of children become excessive. The work cannot be properly tasked—a most vital point in all famine works. The tanks are of little value.

These are the main objections. To my mind the points which are absolutely vital to the success of famine relief works are—

(1) proper daily tasking, the full task being always imposed and *exacted*;

(2) that the workers should have no personal interest in the completion or non-completion of the work;

(3) the maintenance of strict discipline as to conservancy, water-supply, payments, bazaar supplies, tools, etc.

It is clear that the above conditions cannot obtain with numerous little tanks.

Village tanks may of course in some cases be useful in themselves. If so, they should

be encouraged by means of loans for their building. But as famine works, they are the very worst form of work that can be imagined.

71. As in my opinion all works ought to be large works, hutting should always be supplied. If proper arrangements are made for drafting, I do not consider 50 miles by road or 100 miles by rail or river too far. *Provided of course that the work is in a suitable and healthy place.* I would never under any circumstances contemplate opening works to which workers had to go to and fro from their villages.

72. Yes.

73. Yes. That is exactly what I do recommend.

74. The rule.

75. It was not made a definite condition of relief. If a camp was near a village, the villagers of that village could come and go daily. But where tasks are enforced properly, villagers will not go to and fro more than about two miles. They have not the time.

76. I would not make it obligatory, for I do not see the necessity of a hard and fast rule about it. With large works it must be the exception if villagers can live at home and work in the camp, doing a full task. No doubt when near a village a few people, notably children, come on to the works who would not otherwise. But the difficulty is such a small one it is not worth while making rules about it.

77. Of course residence on the works is not exactly popular. It is not intended to be so. But it is not unpopular in the sense that people would sooner die than come.

78. No. And if it were so, I do not think the principle a good one.

79. No reductions in task were ever made. If relief workers chose to go home, that was their own look out. There was always hutting on the works, and the full task was always exacted.

80. On the Meiktila-Myingyan Railway the cost of hutting was Rs. 54,593 or 5·18 per cent. on the total expenditure. The wages expenditure was Rs. 8,19,350, so that the percentage of hutting expenditure to wages was 6·6 per cent. The total units were 7,636,423, showing a hutting expenditure per daily unit of 1·14 annas. Hutting was expensive, as the material had to be brought from long distances

81. No.

82. No.

83. The proportion of dependents—children—depends on whether the works are near large villages. When they are so, *all* the children of these villages are sent to the works with a few adults.

84. Task-work was almost universally used in Burma. The only camp on piece-work was that opened at Zankintaung on August 31st. It never contained over about 1,000 relief workers, and it was only open for six weeks. It was opened 100 miles away from the distressed districts in a place reputed to be very unhealthy, and after good rain had at last fallen. It averaged about 700 daily for six weeks against 29,300 daily average for 13 months on task-work.

85. No.

86. It is possible that if the main object was to get the work done, not to relieve distress, piece-work might be advantageous.

87. The objections are not overstated. I could add further objections felt in practice, but this seems unnecessary.

88. Such could not work on piece-work. Task-work would have to be given.

89. Under the conditions named in the answer to section 86, no.

90. A village gang not exceeding 50 for piece-work, not exceeding 120 for task-work.

91. Yes. If the gangs are properly made up.

92. No, but I do not think the reduction would be great.

93. It would entirely depend upon whether the rates offered were enough to enable the workers to earn enough for the dependents. Ordinary rates are not high enough for this. Task-work is most popular, and the people, except professional labourers, would sooner attend them.

94. This was discussed freely at the Conference at Meiktila, and the results are embodied in the amendments proposed to the Code. I drafted these and agree with them. No doubt the draft amendments are before the Famine Commission.

95. I have nothing to alter in the present wage.

96. No.

96A. Yes. I consider that any attempt to abolish sex distinctions would be not only an error but unworkable.

97. The Conference proposals were to divide children into two classes:—

(1) 7 to 11.

(2) 11 to 14.

Above that are adults. I agree with this.

98. Seven years, but the limit should not be strictly enforced. Weakly children should be exempt from work till 9 or 10.

99. Fines.

100. Yes. They are necessary. There must be a check on too heavy fining.

101. No.

102. It depends. If the work is near the villages and piece-work is plentiful, the bare wage is enough. If the work is distant from the homes of the people, a margin should be given. It depends on the circumstances of each camp and ought to be left to discretion of the Commissioner.

103. Not as a special payment. The Sunday wage should be added to the week day wage, one-sixth to each day worked. There should always be one rest day, Sunday for choice, on which work is prohibited. The payment of a separate wage, however, for this day was found to attract local labour for Saturday to receive it.

113. A great number of the adult males found employment during crop time in Lower Burma. A considerable number too remained at home attending to agricultural operations. If the males of the family had enough money to support the women and children, the latter were always recalled from the camp. I consider that it was necessary for the State to support all those who came into the camps. I do not think many came who could have lived otherwise.

IV.

114. All relief works ought to be carried out by Public Works officers.

115. I think the Collector ought to be responsible for all works in his district. To make him a mere criticising officer would be fatal. He should give the officers in charge of camps a free hand as far as possible, still retaining full control to be used if necessary. The Commissioner should have complete control on all points.

116. Generally speaking the Executive Engineer should be responsible for the camps in all particulars. They are his camps to work under the Famine Code provisions. But the Collector should have complete power of control. As with the relations of civil and military officers from 1886 to 1890 in Upper Burma it is a question of give and take. There are technical questions such as the supply of tools, task, system of payments, which the Collector should not interfere with unless evidently necessary. With a Collector of tact and an Executive Engineer of common sense there is no difficulty in arranging matters. For officers without these qualifications no rules would be of any use. The Collector should be responsible for everything, but he should remember for his own sake that in many details of camp management he cannot know as much as the Public Works officers, and he should again for his own sake refrain from interference unless it is clearly and urgently necessary.

117. No. Certainly not; unless by special authority of the Local Government.

118. I cannot say. The camp officers ought to be Assistant Engineers if possible.

119. Yes. Most certainly. They should all be under the Executive Engineer and orders for them from the Collector should, except in very urgent cases, be always sent to the Executive Engineer. It is destructive to discipline and good work otherwise.

120. Everything in the camp should be under them.

121. No. Unnecessary and inconvenient. There should be a police guard in each camp. Officially speaking the camp officer should not be responsible.

122. Practically all our works were under the Public Works Department.

123. I think that all works are far best carried out by the Public Works Department.

V.

124. Twice a week in any case.

125. The nearest piece. This has been suggested as a footnote to Appendix XIV of our Code.

126. By cashiers. This was always done in our camps.

127. No. It has not been the custom, and I think it would be an undesirable practice.

128. *Nil.*

129. From 8,000 to 14,000. One camp of 20,000 was successfully managed by Mr. Wells by dint of very hard work. It is too large for a rule.

130. I am not in favour of kitchens in any case. I would always give cash doles; he never had any trouble in the matter in Burma.

131. On the Meiktila-Myingyan Railway the percentage of wages to total cost was 77·82. The total cost was 27·54 over normal. Thus the wages paid about represented the normal cost of the work.

This excess of only 27·54 over normal is probably exceptionally good. There were many points in favour of the railway. It ran through the very centre of the affected tract, it was managed by an Executive Engineer with previous famine experience, and for the last two months the wages were reduced to C class, while retaining the B task. I do not therefore think that the excess of 27·54 per cent. can be considered an average one. Probably it is much above the average (see Historical Account of the Famine in Burma, Part VIII, D, pages 24 and 25, and Appendix No. XII).

133 to 139. There are no employers of labour in the three districts except a few Chinamen who have cotton carding yards where women are employed. The rates paid on the works were under the local rates. The only complaint I ever heard was that the weaving of coarse cotton cloth, which is usually done by women at home in the interval of household work, had fallen off. This was natural. The weaving of such cloth is not an employment whereby women can live if they have no other means of livelihood. It is pursued by women who are living at home and who weave in their spare moments to earn a little pocket money. When the famine became severe, such women either emigrated with their husbands or came on to the works where they could earn enough to live on. Weaving then was discontinued.

148. For the three districts the highest was in April 1897 when 2,113 persons were on gratuitous relief, showing a percentage of ·40 per cent. of the distressed population.

149. Entirely so.

150. Yes. The greatest care was taken to ensure this.

151. In ordinary years they are supported by the charity of the village or in some cases by their relations. A famine may drive the relations away on to the camps, and it also greatly reduces the power of the village community to afford charity.

142. There were few children comparatively. The bulk were old and incapable persons of both sexes. There is no *parda nashin* in Burma.

153. No reliable estimate could be given. The number would vary with the intensity of the famine, and the time of year, and also depend greatly on whether the works were near or distant from the homes of the people.

154. That would not necessarily follow. In Yamethin no works were open in the district and very few labourers went to Meiktila. They all migrated to Lower Burma, leaving the cripples and aged behind.

155. No. I do not. He can gauge necessity quite well without any such test. I am, on the other hand, in favour of sending old people, dependents, home from the works to their villages on gratuitous relief.

156. Circle Inspectors should judge such cases on their merits. There is never any difficulty in ascertaining the facts. A hard and fast rule could not be laid down.

157. No; certainly not. Village headmen were responsible that no able-bodied persons were put on gratuitous relief and the check exercised by Circle Inspectors and revenue officers was sufficient to ensure this. The Deputy Commissioner of Myingyan stated that his experience of checking gratuitous relief was that he put more on than he found the headmen had passed. That also is mine.

158. Yes. Headmen of villages were made personally responsible that none were put on gratuitous relief except those for whom it was absolutely necessary. These were checked once a month by the Circle Inspector and whenever any Revenue Officer went to a village he did the same. I never heard of any instance of abuse of this form of relief.

159. No. I do not think so. It never gave us any trouble at all.

160. Not more than the receipt of any other form of charity, Government or private. The term used is 'dokita.' This means usually a person who has no property, is infirm or

very old, and is exempt from taxation. It is a well understood class who live on charity. To class an able-bodied man as a 'dokita' would of course be an insult.

161. We were careful to prevent this. No gratuitous relief was given in any village until it was clear that the villagers were unable any longer to support their poor. Until that time the headman and elders were held responsible. Many villages supported their poor all through the famine, giving a promise to do so.

162. No.

163. No.

164. They are quite unsuited to Burma.

165. There are no caste feelings on the point. Food kitchens would be popular, I think.

166. As the number of those on gratuitous relief in one village rarely exceeded ten and were often enough only two or three and the villages are widely scattered and the 'dokitas' usually quite unable to walk any distance, it will be clear that the answer to this question is no.

167. In money to both questions.

168. At their homes.

169. I only heard of one case, and on investigation it could not be proved. A headman was said to have retained himself a portion of the money given him for gratuitous relief. In answer to point 2, no.

170. It was done entirely by the revenue organization. The only additions were Circle Inspectors in some townships. In townships of which only a part was affected the Township Officer was the Circle Inspector.

171. Not at all.

215. It is impossible to give figures. Money is usually borrowed from chetties on promissory notes without any transfer of land. There is no doubt, however, that indebtedness has greatly increased, especially amongst the headmen, who have suffered very severely from the famine. As cultivators, they got no return from their fields, and as Revenue Officers they got no commission on revenue, for no revenue was collected. I am personally aware of several cases where headmen are in debt beyond all hope of recovery. There are in these tracts so few men who are not mere peasant cultivators that the indebtedness is not wide-spread. Nevertheless as affecting a class of Government servants who were very hard worked during the famine and who got no pay, it is worthy of consideration.

216. There are no forest reserves of any importance in these districts, though there is much scrub forest.

217. No.

218. No.

219. Roots, pith of trees and grass seeds which in places form a considerable addition to the food-supply.

222. No.

223. They overlap perhaps. That is inevitable.

224. I would not modify it.

225. No.

226. No. I do not think so. The overlapping is quite inevitable. The discretion of officers giving relief should prevent any competition between different forms of relief.

227. No. I do not.

228. Yes. It would interfere undesirably. No such shops were started in Burma, as the food-supply was always ample and at reasonable prices.

229. I have no experience of such shops, but there was no fitful raising of rates in Burma. The rates were wonderfully steady—See Table V *a*, Historical Famine Report.

230. It should be given when it can do most good, quite regardless of the stage of distress. In my opinion it should be given about a month before sowing begins whether for early or late crops.

231. All classes who are in need of it.

232. If there were sufficient funds available. In Burma there were not.

233. Yes, if the funds allow, but our funds were not enough to help half the people who wanted it and were unable to obtain advances. It seems to me that distress must be on a very minor scale or charitable funds on a very large one if there is enough money to assist all who cannot get advances and yet have some left.

234. In providing money for seed-grain and for subsistence till the crops ripened.

235 & 236. Please refer to my Famine History, of which no doubt a copy has been sent to the Commission. All the proceedings connected with the charitable fund are fully described there—Part VIII, B, pages 17—19.

237. Little was expended under this head.

238. Clothing to the destitute.

239. Yes.

240. It has enabled much land to be cultivated which would otherwise be fallow.

241. No.

242. We had none. Very many, over 200,000 persons went to Lower Burma, but we received no complaints from there that they became helpless or wanderers. They all got work in the fields.

244. We had no poor-houses and the death-rate on the famine works was very low.

245 to 247. *Nil.*

248. Please refer to my Famine History.

249. I cannot say, but probably it was entirely due to it.

250. There was an increase in mortality, but the figures are so unreliable that it is impossible to say what it was. Certainly it was not very great for I never heard the people allude to it. Unless the relief measures had been prompt and effective, the death-rate would have been very large. It was so in the famine of 1856-57.

251. In the dry zone it is never wet enough to affect the health. I should not say that the famine year was more healthy than other years. I have a suspicion that it was less so. The very dry hot winds that blew with fury for six months were not good for children or old persons.

252. No to both questions. I have seen a good deal of cholera, and I have never known a case where it could be traced to drinking water by any evidence that a Court would look at. I have often heard cholera attributed to drinking water. I have never seen this proved. I followed the course of the cholera during the famine very carefully and with this result. There seemed to be no possible connection between case and case. A man would die suddenly in one village and a week later another would die. Then it would cease. It would appear simultaneously at both ends of a camp and not in the middle. But this was always observable. Cholera broke out always two days after a heavy shower. There was never any cholera till a shower came. Then there would be a few cases, and it would cease till the next shower came. These showers of 40 or 50 cents were all absorbed by the surface soil at once and had no effect on the water-supply which was taken from deep wells carefully guarded. Cholera, therefore, seems to be due to a sudden change from intense dryness to damp. It is always associated with dampness in air or soil. Cholera was, I believe, more general in the camp than in the villages, but as the workers feared the hospital with a deadly fear, whenever a person showed symptoms of cholera his friends always took him away. Thus the death-rate appears low, but was not really so. Yet in the camps the precautions taken with the water-supply were extraordinary. They are given in my Famine History. This care of the water-supply was no doubt an excellent measure and successful against many forms of diarrhœa and so on, but its effect on cholera is, I believe *nil.*

If cholera was derived from drinking water, it would surely be possible to trace the cases in a camp to one well, or to one water cart. Such was never possible.

253. These diseases were not prevalent.

254. *Nil.*

255. No. The mortality was greatest amongst children, but parents did not neglect their children. Food, however, such as oil-cake, that is wholesome for adults, is not so for children. But the infant mortality in Burma is always very large, see Part II, Historical Famine Report.

256. *Nil.*

257. The measures taken were everywhere successful.

273. Rice and jowar.

274. Two meals a day—one about 10 A.M. and one between 4 P.M. and sunset. These meals consist of boiled rice or jowar and a curry of vegetables in a small bowl with some dried fish.

275. Rice is always available imported from Lower Burma. But the poor often use sesamum oil cake to supplement the rice or jowar. The price of this cake is about ½

that of rice, and it is not unwholesome. They also use grass seeds, jungle roots and the pith of trees.

276. Oil-cake is the best and most plentiful. The others are mere occasional helps.

277. There is no other grain that could be substituted.

278 to 281. *Nil.*

282. In Burma as a whole there was ample food and to spare. The prices of rice rose in the famine districts, because there was no local supply and all had to be imported. But the price of imported grain remained very steady (see prices in my Historical Report of the Famine).

283. As regards the famine districts which rarely grew enough rice for the local demand, the price depends on the rainfall. Generally speaking the opening of facilities for shipping rice to Europe has raised the price a great deal. Possibly the appreciation of gold has assisted this. But the prices are far more even than formerly, due to a much greater supply and greater facilities for transport.

283A. Prices did not vary. The rice crop all through Upper Burma, except in Kyaukse, failed and all prices were ruled from Rangoon.

284. The profit to be made on importing rice was a fair trading profit, that is all. All demand was immediately supplied. The supply was always and everywhere ample.

285. Yes. Supply was ample.

286. Yes, always.

287. No. The only export was beans. As regards this, please see Historical Famine Report, Table IV.

288. No fortunes were made. The competition was great and the supply ample in Lower Burma. A fair trading profit was realized.

289. Few large stocks are kept. The majority of the population are cultivators and each keeps sufficient grain for himself or his family. Labourers too are paid in grain often, which they keep. Imported grain is brought in from week to week as required. No large stocks are kept.

291. No one had any to sell.

292. Yes; they were normal.

293. See answer to 289.

294. No surplus food-grains, except beans, are produced in these tracts. They export cattle, sesamum and cotton and import rice. Private trade is always ready to import.

295. } Please see Historical Famine Report, Part I.
296. }

297. Failure of crops of sesamum, cotton, etc.

There is very little non-agricultural employment of labour.

298. They fell, because the demand for all labour was decreased.

299. No.

300. }
301. } Please see Historical Famine Report for an account of the famine of 1856-57.
302. }

303. No. Prices were fair.

304. Burmese and Chinese merchants.

305. As in Burma as a whole we are always likely to have far more food than we want, it is not necessary to consider this question as affecting Burma.

Written answers to the Commission's questions by Mr. B. S. Carey, C.I.E., Superintendent, Southern Shan States (late Deputy Commissioner, Myingyan District).

[The notes are not exhaustive and do not contain sufficient detail, but I have written them on tour and without the assistance of the diaries, statistics, notes, and references, which are in Myingyan.]

As to the extent to which the prescriptions of the Provincial Famine Code have been departed from or have been found to be unsuitable.

39. In my district (Myingyan) famine works were opened—

(1) On the earthwork of the Myingyan-Meiktila Railway.

(2) The repair of a large of tank which had during Thebaw's reign burst its bund and fallen into utter disrepair.

The labour on both works consisted in earthwork cuttings and bundings, and stone breaking for ballast on the former work also provided considerable labour.

Private relief was given for the greater part out of the Famine Relief Funds. As regards the relief workers those who had lost their all or who were never in a higher position than hirelings, it was only possible to relieve them to the extent of clothing them.

As regards the farmers they were given money to save them from selling their cattle to enable them to tide over the bad times until the next crop should be reaped, and they were also put in position to buy grain for sowing the next crop. (I believe, though I had then left the district, that when the famine closed, some money gifts were made to relief workers on proceeding to their homes when the camps were broken up.)

40. As Deputy Commissioner of the district from December 1895 to October 14th, 1897, I saw scarcity creep along till it became distress, and I saw distress stiffen into famine. I was, under the Commissioner's control, in charge of the famine works in the most stricken district in Burma.

41. The famine works were all Code measures adopted after test works had assured us that famine works were necessary.

42. Alterations were made in the Code, and kitchens were not found necessary or desirable, but these matters have been fully dealt with in the report of the Famine Conference held at Meiktila last December, and therefore I need not dwell on them.

44, 45, 46, 47, 48, 49. I can conceive no better works than those which were undertaken in my district; a long line of earthwork prevents overcrowding, which is essential from sanitary reasons and also enables the workers to turn out more work than if crowded, also accidents are avoided; also the tasks are easily checked.

The class and kind of work was approved of by the workers and by the general public. My opinion on the famine and the works and the methods of dealing with famine is that expressed by my colleague and the Commissioner in the above mentioned report.

I.—As to relief works.

51. I condemn all small works of every kind, especially "the village tank" as a test of famine or as a relief work.

The "village tank" is close to the village; the children, the people out of work for a few days, and people who are not distressed but who are willing to earn a famine wage—good daily food—flock to the work. It is no test. I have always noticed that when a work is alongside a village, the village is largely represented, but as the work gets further and further off, the numbers steadily decrease.

As permanently benefiting the villages, it is impossible to say. I have seen tanks which have been of use, but as a general rule I do not believe in them as a benefit.

II.—As to large and small works and the distance test.

71. The people will go any distance for food and work, provided they can beg their there and are really starving.

They will return three miles and more to their village in preference to sleeping on the works if the accommodation is poor or in an exposed place, but when the accommodation way and the site suits them, they prefer the site of work.

As regards coming to the works to stay, gangs came 80 miles to work on the railway, and doubtless they would have come further had not work at a better rate been obtainable in Lower Burma (and almost as handy), and all those who could afford to get down to Lower Burma did so. I certainly consider that relief workers should be expected to come 100 miles in Burma.

72. Most certainly. I should take care that everyone knew that work was procurable at a large work, and if they refused to move, their blood is on their own heads. It seems to me that we can no more force a man to move to the works than we can force food down his throat if he refuses to eat.

From what I have read of Indian famines and from what I have seen in Burma, I should say that the Burman helps himself and is more 'game' than the Indian. I have never seen an able-bodied man sit at home calmly to starve when work is obtainable.

73. Most assuredly I recommend that relief workers be drafted to any useful work wherever it may be—be the distance 300 miles. It would be to my mind a very weak policy to let the famine-stricken waste their energies on useless works and for Government to spend its money on rubbish when valuable work can be done for the State in addition to the object of keeping the people alive and tiding them over to better times.

Provided that it be borne in mind that hill people cannot work in a swamp and *vice versâ* and that dry zone people cannot work in dense jungle and the terai, I certainly hold that the State should draft relief workers to any place where they can be made the most use of. I learn that the earthwork in my district cost only 27½ per cent. over and above ordinary rates.

74. My impression is that residence on the works was the general rule; I have not the figures.

75. Residence was not made a definite condition and the condition of affairs was those who lived near the works returned home and those who lived at a distance remained.

76. I do not favour making residence obligatory. Such a measure would be harsh and uncalled for; those who have the good luck to have a famine work close to their village might be allowed to reap the benefit of their luck.

I am perfectly convinced that a high task and a low rate of wage are *not* in themselves a sufficient test of starvation, but they are a sufficient test of want. I had lots of experience of this, and people came to the works to earn a day's food so as not to exhaust their little stock which they required for seed-grain.

Toddy tree tappers went off the works at tapping time and returned after the season was over; it is not to be believed that they had made no money, on the contrary; they had; but they were keeping it against the time when sickness or closing of works would throw them on their own resources. If the people are so hard up as to do full tasks for strict famine wage, relief is desirable, and it is perfectly impossible to distinguish between the person who would starve if he were not given work and the person who has a little money, but who prefers to be a famine cooly to spending it. I consider that the tasks on our relief works were indeed tasks and no pretence or joke at all.

77. Residence was not distasteful at all. It must be remembered that we had a large staff, and compared with India small numbers to deal with, but I must say that the housing of the people on the works was, though cheap, a most admirable arrangement.

78. With the water districts of Lower Burma so close by, universal famine is absolutely impossible.

The dry zone of Upper Burma alone is undefended against famine.

80. I have not the figures here.

81. No; the cold in no way affected the health of the people adversely.

82. No blankets were supplied except in the hospitals.

83. I have not the figures, but my impression is that small and numerous works attract dependants. Personally I condemn such small and numerous works for every reason and maintain that a few large works are absolutely essential for the good of the State, for the proper administration of famine and in the interests of the people themselves.

III.—Task-work and piece-work.

85 to 97. I have experience only in task work which I thoroughly approve of. The people understood it, and they did a task which was a real task as the cost of the work done proves.

98. Seven years.

99. Cut them their pay to the extent of the amount of work undone.

If there is a class of man who prefers the pangs of hunger to a day's work, I have not met it, and I do not think that such exists in Burma.

100, 101 and 102. My views are those which have been expressed by the members of the Burma Famine Conference in December 1897.

103. I consider a day of rest necessary, and the people must eat on that day, though they rest. I consider that no Sunday payment should be made, but I am strongly in favour of the method in Burma, whereby the Sabbath day's pay was distributed over the whole week.

113. Undoubtedly instances occurred where men went to Lower Burma for good pay in the rice-fields, leaving wives, children and dependants for the State to protect.

It is doubtless annoying, but it cannot be helped. It is wise for the man to go to good pay, for he will return with money and recover his position in due course, and as regards the dependants and babes they would only die on the way.

I have seen women and children returning from Lower Burma, and I saw in some of them far worse specimens of humanity than ever I saw on the works; perhaps it was not starvation so much as fever that had reduced them, but nevertheless their trip to Lower Burma instead of to the famine camp was a dire mistake. I consider that it is necessary for the State to take care of such people, and I consider it sound for the State that those who can go afar for work should do so and not accompany their feeble belongings to the famine works.

One must think of the recovery of the district. Famine works do not put money into the workers' pockets, but merely food into their bellies, and if at the end of the famine, the men return from Lower Burma with money the household makes a fair start again and will pay taxes after the first year's crop is reaped.

IV.—Relations of Civil and Public Works officers in connection with the management of relief works.

114. I do not believe in civil control. I consider that technical officers, *i.e.*, Public Works Department officers, should have direct charge of all works.

115. A Collector is in charge of his district and no one of any department whatever should relieve him of the responsibility of control in his district. I strongly protest against anyone except the Collector being responsible for the famine works in his district.

The Commissioner should control his Collector in famine works as in all other matters.

116. The Executive Engineer should have charge of the camp as was done in Burma and his accounts alone should not be subject to the control of the Collector. The tasks, the payments, the fines, the sanitary arrangements, etc., are all matters which should be in charge of the Camp Officer (Engineer), but the Collector is bound to enquire into and inspect all and control all. This leads to no trouble. I was responsible for the works in my district, and I inspected them periodically and had a daily diary sent me by an assistant (a subordinate Magistrate) who was stationed at each camp and who used to enquire into complaints and see that payments were made and received and that my orders and those of the Commissioner and the rules of the Code were carried out.

118. I have had no experience. I consider that Public Works Department officers are far the best, but if they are not available, I should seek amongst Magistrates, Military and Police officers for officers.

119. I have no experience, but I should think that they should be under technical men whilst engaged on what is technical work.

120. Yes, I certainly think that the man who sees the tasks set, and the work done, should see that the pay is given and should superintend conservancy and bazar arrangements. About kitchens I do not know, but I think that he should control them also.

121. Yes; I often thought that an officer holding magisterial powers should be on the works to deal with thefts, affrays, abuse, and other such cases. As regards the committing of nuisances magisterial action will be useless.

122 and 123. All the works which I had charge of in my district were under direct Public Works Department management. As regards the above set of questions (IV) I like the system which was in force in Burma; perhaps however the enormous size of operations in India would not admit of such a system being generally adopted.

The system was as follows.

The work was directly in charge of an Assistant Engineer directly responsible to the Executive Engineer in charge of the whole work. As the Code laid down, I as Collector was responsible for the work, and I was therefore given an Assistant who resided on the work. The Assistant Engineer reported daily to the Executive Engineer and my Assistant daily to me. My reports I sent on to the Commissioner.

The Commissioner controlled me in famine matters as in all other District matters.

The Assistant Engineer in charge of a Camp. Camp Officers saw tasks set and work done and wages paid; he had charge of the accounts, he had charge of the huts, the water and the conservancy arrangements and of the bazar. My Assistant helped him in dealing with new comers, sanitary arrangements and bazar: he daily saw all that went on on the works and reported to me, tasks set, wages paid, bazar rates, disputes, condition of the people, their behaviour and feeling, and any matter connected with the famine arrangements which I ought to know. On receipt of his reports I inspected or

not as seemed necessary and reported to the Commissioner or addressed the Executive Engineer.

The civil officer on the works is an excellent arrangement, and I should like to see a European invariably as civil officer with magisterial powers, and I consider the Police Inspectors in Burma a very good recruiting ground for civil officers.

V.—Other details of management.

124. Twice a week after a start has been made is ample in Burma.

125. I favour the pice unit system.

126. In Burma I advise that a cashier pay the headman of the gang in the presence of the people on the actual site of work.

127. Challans were not required : all who presented themselves were given work.

128. No hillmen attended the works.

129. It depends on the work entirely. Crowding must be avoided.

A Camp Officer can manage 10,000 people comfortably and double the number, provided he has not got them scattered over more than 3 miles. Provided that he has capable subordinates I should consider a charge of 10,000 a normal camp.

131. Away from figures and reports, I cannot possibly answer this question.

VI-A.—Interference with the supply of labour to private employers.

133—137. No : most certainly not. The work was always harder and the wage smaller on the famine camp.

138. I never could notice that the distress of the working class encouraged the traders and the rich to undertake work which they would not otherwise have done. I did notice that cooly wages fell in some cases on account of the necessity of the labourers.

139. No. Not in Myingyan District.

As to Gratuitous Relief.

148. I have no figures with me.

149. All the people belonged to rural areas and the great majority to the agricultural classes.

150. I consider most certainly that the people so relieved were incapable of work, and though some had relatives, these had deserted them for work in distant places. I inspected much, and I generally added to the list and seldom took a name off it. The relieved were without resources of any kind.

151. They are blind or imbecile or leprous or maimed : they are supported ordinarily by relatives or by the gifts of the benevolent, but true famine closes such sources of food.

152. Chiefly women and children : often a widow with four or five small children, and these generally ailing and certainly pinched.

153. I have no figures.

154. Not of necessity. The males of a village might migrate for work, leaving sick and old and crippled behind, and if these were found starving, they would have to be supported until the relatives returned.

155. I consider it as a general rule to be unnecessary annoyance, and in some cases actual cruelty besides encumbering the camps.

156. Yes ; I would, for it would be unjust that the incapable should starve.

157. My experience was that the Circle Inspectors worked wonderfully and were far stricter than I was about putting names on the list, and I was very strict also ; of course every one would accept gratuitous relief and the working of this method of relief must be most carefully checked.

158. Yes. I had a thoroughly efficient staff. The precautions taken were frequent checking of diaries with register and register with recipients by the Subdivisional Officers and Deputy Commissioner.

159. In my district I required nothing more. The Thugyis were the local officers, a special officer called the Circle Inspector was in charge of each township, and the Subdivisional Officers and I checked their work.

160. Certainly not in Burma.

161. It cannot but be so. A man who has not enough to see him to the next crop will not feed his aged aunt at the risk of starving his children, especially when he knows that Government will not let her starve.

162. No.

163. No. The landowners would not undertake such work, and the small work system I condemn in every way.

164. I have no experience of kitchens, but I very much approve of the gratuitous relief system in the homes of the people as practised in Burma.

165. There are no caste prejudices in Burma.

167. In money: I prefer money.

168. It was given actually at their homes by the local officers.

169. Such close checking was made that there was but little chance of cheating. I saw no cases of persons paying to be put on the list.

170. The police visited villages and submitted special diaries. They made reports, but they were never used in distributing relief.

171. To a very small extent, and such relief was purely local and not general.

As to loans to cultivators and landholders.

200. No money was advanced for such purposes.

201. The money spent on cattle was of the very greatest benefit. Yes; most certainly it was impossible to help a large quantity of deserving cases and it was also unwise to risk money in the most hopeless tracts.

202. Cattle advances. One year I think; the time can be extended.

203. No.

204. *Bonâ fide* cultivators should, if money permits, be kept in their class and not fall to the position of a cooly. I think that individual cases must be dealt with on their merits.

205. I do not say that because a man has cattle he should not be forced to go to the works. I consider that it would be a pity to allow him to sell his cattle in order to keep off the works.

206. Undoubtedly every cultivator would sooner borrow than go on the works, and this could not be allowed. I don't think that a hard-and-fast rule can be made. A Deputy Commissioner would feel disposed to help the cultivators of a village which usually paid full tax and would not assist another village whose record showed that it could not usually pay its taxes, for such a village is not worth helping and the people should either migrate or drop to the position of labourers on the works or elsewhere. I consider it very wise to help steady cultivators who live in a tract worth cultivating, but I would not help cultivators to reside in a particular spot where the land is proved to barely support the people and not enable them to pay full taxes as a regular rule.

215. I have no figures. I can say that the cultivators of my district are ruined and few are starting now clear of debt.

As to the use made of forests.

216—219. There were no reserved forests in my district.

As to private Charitable Relief as auxiliary to State Relief.

222—241. I much regret that I have no papers on the subject with me and not even the rules for my district. I held the opinion that famine works merely kept the life in the people during a time when, if not relieved, they would starve; and in order that the district might recover itself as quickly as possible after the famine had subsided, it was necessary to help the cultivator to maintain his status. I gave Government cattle advances to be repaid and the Charitable Relief Committee voted large seed advances not to be repaid. Of course I believe that some of this money was spent in buying grain for food and not grain for seed, but our object was fulfilled all the same. We kept the cultivator from falling, and if good crops come next reaping time, the labourer class, male and female, will receive work from the cultivators as before the famine.

We were not unmindful of the existence of the labourer. We could not of course start the broken down cultivator with bullocks or help the ordinary labourer off the works, but we clothed them, a very necessary arrangement and an expensive thing which they were incapable of doing for themselves out of famine wages.

I know nothing of grain shops. I prefer giving cash in all cases connected with famine and relief administration, in lieu of kind.

In answer to question 230, I consider that no hard-and-fast order should be given. The aim and object is to watch the cultivator and not to let him part with his cattle and seed-grain. I believe in keeping him going right through the famine.

I believe in helping the same farmer with a seed advance from the Charitable Relief Fund and a cattle advance from Government also if necessary; and by a farmer or cultivator I mean the man who habitually cultivates, who habitually pays his taxes, and who habitually supplies work to the labouring classes.

In short I believe in Government famine works to prevent starvation; in clothing the naked relief workers out of the Charitable Relief Fund, but more than this cannot be attempted for the labourers, and the great bulk of the relief fund should be invested on the class of people who can recover the district after famine and this class is the farmer.

The lists and statistics which I kept at Myingyan were very complete, and I have no doubt that my successor has been called on to give actual figures.

As regards question 237, the clothing of the naked labouring class and the advances to the cultivator class called forth equal gratitude from both classes and the gratitude was both keen and sincere.

As to emigrants and wanderers.

242. Wandering in the sense of moving without any fixed objective was not experienced at all. Wanderers with their objective as the paddy fields of Lower Burma and the local famine relief works were very conspicuous. They were local people who preferred working abroad to starving at home.

243. We had ample relief works for all. It would be the greatest mistake to stop wandering in the sense of migration. Migration from a dangerous tract to a fertile trac should be encouraged and by every means forced on the people.

244. The death-rate did undoubtedly rise. There was no starvation, but the old and the very young died in larger numbers than in times of prosperity owing to feeding on roots and herbs which are in ordinary times not considered to be human diet.

245. Migrants from neighbouring districts in small gangs came to my relief works, being attracted by regular work and regular pay.

246. They were allowed on the works on exactly the same conditions as local people.

247. I think that all comers should be received irrespective of where they reside. I hold that a full task and a carefully fixed rate of pay is a sufficient test of real need.

It would seem to be equitable if a Chief of a Native State were asked to contribute towards the expenses of works which are not recovered out of value of work done if his subjects are largely represented on the works.

257. I consider that the Burma Famine Code as revised by the Committee at the end of the famine is as near perfection as it can be. The sanitary arrangements were most excellent and the treatment of wells and water-supply were most thorough and sound. My views are those expressed by the Committee at Meiktila except in one thing. I hate the word "fine" in connection with famine labourers. I always held a different view to the rest of the officials on the subject. They unanimously declared for fining people who defiled the camps, whilst I held that making the offending gang leave work and clean their camp was more efficacious and avoided fines. With this exception I strongly commend the opinion of the Committee and Mr. Watson's (Executive Engineer) rules regarding latrines, sanitary arrangements and water-supply.

As to the ordinary food of the people.

273. In bye-gone days rice was the staple food of the people, but Myingyan District has steadily lost its rainfall. Paddy is hardly known now except from imports. The staple food now all the year round is millets, beans, maize. The exports are cotton and sesamum seed and oil.

274. Two meals: food consists of—

(1) any meat which may be procurable made into curry and eaten with condiments and vegetables and herbs; or

(2) curried vegetables or jungle herbs and boiled millet seed; or

(3) beans and millet mixed;

(4) rice, when the sale of cotton or palm tree jaggery or sesamum admits of the purchase of imported rice.

275. If rice, millets and beans are not procurable in sufficient quantity the people mix 'Hnanpat' (sesamum oil-seed cake) with millets and beans or rice and even eat 'Hnanpat' alone.

Hnanpat in small quantity is fit for food, but in large quantities is bad and is not fit for consumption. If the staple grains are not procurable, the people eat roots and herbs and

pith of trees which they collect in the jungles and which are not usually eaten: such food has but little to commend it except that it prevents the pangs of hunger by filling the stomach. A prolonged diet of such stuffs would result in death either from diarrhœa or wasting of the body and its strength.

278. We had no kitchens.

As to Food-stocks and Prices.

282. The bumper crop of Lower Burma saved the food-stocks in Upper Burma and prevented panic and kept the prices reasonable. We had much to be thankful for, in that Lower Burma is so safe and so fertile.

The famine works maintained but a small proportion of the famine-stricken. Migration to Lower Burma is the main cause of the famine being so successfully combatted. Migration to Lower Burma encouraged and not famine works is the way to deal with famines in the dry zone of Upper Burma.

283. My opinion is worthless on this subject, I fear.

283-A. The difference was not marked. My district was famine-stricken. It had no food-stocks and no money, and no means of getting either.

Rice as I have said steadily came up from Lower Burma. We were never short of rice on the river, but the poverty-stricken had no means of obtaining it except by famine labour.

284. The grain dealers were active and did well by themselves and by the district. We kept in touch with the market in Lower Burma and the large stocks there and the failure of a 'ring' ensured steady and equitable rates.

285. Those who had money were not affected by the famine as regards the purchase of food.

286. Certainly.

287. There was no exporting of food-grains except beans from islands in some instances, and these are regularly exported by the brokers; and the island population was not famine-stricken, though they were damaged by the abnormally low rise of the river.

288. No fortunes were made.

The grain trade was brisker of course, but profits per bag were not larger. My opinion is that those who carried on their normal transactions did well in as much as they sold more grain, but those who speculated by lying on the expectation of a steady rise lost money, as the new bumper crop drove down prices and at the same time filled the local grain dealers' stores.

289. At the close of the famine my opinion was that the supply on the hands of the grain dealers was above normal, but no more than they would get rid of in the ordinary course of business.

290. } There were most certainly no surplus or private stocks. We looked to Lower
291. } Burma for our daily food.

292. Yes.

293. Large crops of food grains are not raised in my district and consequently such storing is unknown.

294. Myingyan District is bounded on the west by the Irrawaddy, and the river is only 73 miles from the railway which runs to the east of the district from Rangoon to Mandalay.

There are excellent roads connecting the district with the railway and the river, and the cotton and sesamum crops are annually and easily exported, whilst private traders import food-stocks regularly and easily.

295. } We helped the proprietors of land and workers of State lands indiscriminately
296. } and to our very utmost with advances to enable them to continue cultivating. Our whole aim was to keep them at their work. They formed the bulk of the people relieved, and as I have already said we only attempted to assist the cooly and labourer class by clothing them, whilst Government undertook to feed them on the works.

297. The district may be said to be agricultural, but the lacquer work industry, pot-makers, theatrical artists, pedlars, etc., were in proportion to their numbers just as largely represented on the works as the agricultural class.

298. Wages did not go up, for there was abundance of labour available and the prices of staple food did not materially rise.

The district is purely agricultural and such non-agricultural pursuits as there are do not require technical men with special training. The lacquer trade was hard hit, because there were no sales and the people came to the works. The price of lacquer work did not rise but the reverse.

299. I did not observe this.

300. Continued and ever increasingly bad years have made the people less able to combat famine. The last famine was in 1856-57. The people were then rice-growers, the crops failed and they starved in large numbers. After this they gradually changed their staple crop from rice to millets on account of its hardiness and its independence as regards heavy rains. Millet growers are less wealthy than rice growers at all times and even the millet crops began to fail some years back and now they have failed entirely.

Yes; the people are less able to combat famine. They have nothing behind them. The most fortunate ones have land, a yoke or two of cattle and seed-grain and also a debt to Government or to a chetty, and they depend on the parched arid soil to bring them out of debt and to feed them in the future.

The cattle disease, which ever hovers about nowadays and the rains which are annually more whimsical, may at any moment slay the cattle or fail to germinate the crop, and then the unfortunate man will become a daily labourer in Lower Burma or a relief worker on the famine works in Upper Burma.

I hold out no hopes for Myingyan District. The watered places cannot support the population and the unirrigated is not worth the cultivating.

I foresee in every ten years to come scarcity in four years, famine in one, and a crop out of which the people can pay full taxes and live as of old but one year out of the lot.

301. There is no reluctance about going to the relief works, because they are relief works, but no one goes to the relief works if they can get any lighter work for the daily food.

302. Everything that was marketable was sold, but there was but a small demand for jewelry.

The whole place was famine-stricken and impoverished, except the chetties who did do a larger trade than usual.

303. Not in my district.

304. Chinamen and Burmans are local grain dealers.

305. On this point, as a Deputy Commissioner, I do not think I need offer advice.

No. 174—1-S.-4, dated Rangoon, the 12th May 1898.

From—The Revenue Secretary to the Government of Burma,

To—The Secretary, Indian Famine Commission.

In continuation of my letter No. 326—1-S.-4, dated the 16th March 1898, I am directed to forward for the information of the Famine Commission the replies received from the officers in the Public Works Department whose names are noted in the margin to such of the questions formulated by the Commission as relate to Public Works matters in this province.

Mr. C. J. K. Watson, late Executive Engineer, Famine Relief Works Division.
Mr. J. Benton, Superintending Engineer, Irrigation Division.

2. I am to convey the following remarks on the opinions expressed in these answers:

Question 14.—The figures given in columns 3, 4 and 5 are, in the opinion of the Lieutenant-Governor, very largely conjectural.

Question 16.—The figures as regards the estimates of increased area and outturn given in the answer to this question are also conjectural. The Lieutenant-Governor is unable to accept the views expressed by Mr. Benton in the concluding portion of his answer to this question.

Question 17.—The amount of increased produce estimated, *viz.*, 477,783 tons, is far larger than the amount ever exported from Lower Burma to Upper Burma in any year which as yet has never reached 200,000 tons. But even if the increased produce estimated be grown, Upper Burma will, it is considered, not be completely protected against famine; it will still no doubt continue to import from Lower Burma, itself also exporting to Lower Burma. Irrigation works on an extensive scale are projected in Mandalay, Minbu and Shwebo; their completion will render the tracts affected by them secure against famine, but the dry tracts of Meiktila, Yamethin, Myingyan, etc., will be just as liable to famine as they are now: they will perhaps benefit to a small extent by an increased demand for labour for reaping, but they will not benefit in any other manner. The Lieutenant-Governor

does not concur with Mr. Benton's views that the cultivation of dry crops in Upper Burma will be a panacea against famine. Dry crops are cultivated very extensively over large areas in the dry zone districts, but with the capricious and scanty rainfall which often occurs, no crops will grow. The Upper Burman is no doubt too prone to cultivate rice; but this is only on certain classes of land.

General question 62.—The Lieutenant-Governor does not agree with the general condemnation of impounding tanks. These are found to be very useful in India; they increase the outturn in any but years of very favourable rainfall. They do not in His Honour's opinion attract population as suggested by Mr. Benton. Although they should not be carried out to the detriment of more profitable works, yet it cannot be assumed that works, the ultimate result of which is to increase the total produce of a tract over a term of years, are an evil.

General question 72.—The Lieutenant-Governor considers that it would be practicable to withhold relief and that relief should be refused in the case suggested.

General question 78.—His Honour considers that the answer to this question should be in the negative.

Written answers to the Commission's questions by Mr. C. J. K. Watson, late Executive Engineer, Famine Relief Works Division.

I.—Extent to which works of public utility may be available as relief works.

70. Similar to those in other provinces—see columns, pages 6 to 8; but this will probably be much modified, see Conference Report, paragraph 6. Various small road projects amounting in the aggregate to Rs. 1,72,000 had been sanctioned as famine relief works in the Meiktila and Myingyan Districts before the famine occurred, but as these roads are of doubtful utility in the dry zone, it was considered more profitable to employ the famine labour on the earthwork of the Meiktila-Myingyan Railway.

The following works had been sanctioned as famine relief works in the Meiktila and Myingyan Districts before the famine occurred.

Meiktila.

	Rs.
1. Constructing a road from Meiktila to Shamangi	43,546
2. Constructing a road from Pindali to Kokozu	10,058
Total for Meiktila ...	53,604

Myingyan.

	Rs.
1. Constructing a road from Natogye to Kama	6,060
2. Metalling and improving the Myingyan-Natogye road	23,640
3. Constructing a road from Letpabya to Shibin	7,087
4. Constructing a road from Shibin to Settein	6,090
5. Improving the existing road from Nyaing-U. to Kyaukpadaung ...	19,784
6. Improving the Kyaukpadaung-Letpabya road	21,580
7. Construction of the Myingyan-Mandalay road	6,134
8. Collection of metal on the Myingyan-Meiktila road	8,778
9. Collection of broken stone for metalling and improving the Natogye-Pyinzi road	19,120
Total for Myingyan ...	1,18,273

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II.—As to large and small works and the distance test.

71. (*a*) This should not be allowed at all except in rare cases. It was only allowed once on the Meiktila-Myingyan Railway where there was cholera in Yonsin. Work was then started near it to keep its people out of the regular sections. It was allowed in Madras in 1891-92 but was quite subversive of discipline.

(*b*) No limit, *e.g.*, people came 40 miles from Kyoukpadan township to the Taungtha camp, while others were drafted by rail and river from Meiktila and Myingyan to the Yaukintaung camp of the Mandalay canal, distance in each case over 100 miles.

72. Yes; unless there were works nearer, you would never get a Burman to see the justice of making him pass one open relief work to go to another.

73. Yes, certainly; only don't attempt to open any local work except on very low wages as a receiving depôt.

74. The rule, almost universal.

75. No; the railway runs through the centre of the affected area and people had to come to it. People from a village on it lived, no doubt, in their village when their section of their camp was conveniently close, but this would never be for long.

76. You cannot make things "obligatory" in Burma. Everything should be done to induce people to live on the works. People not requiring relief will come on the works if allowance is made for distance travelled to and from works, but I do not think otherwise. I think the Burma task-table is an ample test, if *strictly enforced.*

77. Neither in Madras nor Burma, have I found this.

78. Not satisfactorily, but suitable works could not be found in the dry zone of Burma.

79. I tried this in Madras in 1891-92 in some small works which would not last long enough to be worth making hutting arrangements for. My order ran—"Where a gang has to travel more than a mile from its village to the work spot, the task will be reduced 10 per cent. for every 3 miles travelled over and above the first mile, etc., etc." The system did not answer, check being impossible, and it was abandoned.

80. See form G attached to Conference Report: 2·73 per cent. of total expenditure. This included hutting material for latrines. See also chapter VI of draft rules. The former gives the actual cost for the whole famine; the latter the detailed cost for new huts.

81. No; they had no more cold and discomfort than in their own homes, and their health was better.

82. No; except in the hospitals.

83. The proportion was very similar on all our works.

As stated elsewhere dependants averaged 16·9 per cent. of total camp population, 16·6 per cent. being children under 7 and 0·3 per cent. being adults. A certain number of children undoubtedly were not *bonâ fide* dependants, but were taken from the neighbouring villages by friends on the works, but the number must have been very small indeed and it was quite impossible to prove.

III.—Task-work and piece-work.

84. Practically all were on task-work—see paragraph 9, Conference Report.

85. No.

86. Yes. (1) When the first rush is over and both temporary subordinates and relief workers have settled down. (2) When a work, or portion of a work, is or can be fed entirely by the drafting of *trained gangs* and be safe from new comers. (3) When the rate of wage is ample, so that *all* can earn a livelihood for themselves and families, but payments strictly limited to what would be given under task-work, so that the professional labourer, or the man without encumbrances, will not be tempted on to the work. (4) At the end of a famine, as the rate can be steadily, gradually reduced until no one will stop who can live elsewhere.

87. No; but the paragraph deals only with "*ordinary piece-work*" (the usual system Public Works Department) and that system is absolutely incompatable with relief.

The piece-work, I advocate, is strictly limited and, as stated in this paragraph 133, "differs little from task-work." The "little," however, includes the abolition of the ugly prison-like words "task" and "fine" and people are simply "paid for work done." As a matter of fact, however, there are fines, as in order to earn the wage a gang would earn by task-work, it must do the quantity of work that would have been its "task" under the task-work system. In other words fines become automatic. It is not expensive as no gang can earn more than it would under the task system. It does not save establishments much, as muster rolls, etc., must be kept up. It saves it a little by promoting smoothness of working, as people who will not expect to be paid for more work than they have done will resent the *punishment* of a fine, start making complaints about everything and generally giving trouble.

88. Simply increase in their case the rate paid for work, so that they could earn the wage by a lower outturn. As they improved in strength, the rate should be lowered. The delicacy with which this can be done is a great advantage over the task system.

89. Certainly, most strictly, otherwise, with rates at which an ordinary relief worker could support an average family, these people, among whom women and children work freely, would make fortunes and all labour would be drawn off neighbouring works.

The rate should be calculated for each soil, lead and lift by the task-table recommended by the Conference after actual use through the famine. It should be such that in each case the working members of an average family (consisting of one man, 2·27 women, 0·69 working children, 0·79 infants and 0·01 adult dependants) would earn by doing the task calculated from the table the amount that would be paid to the whole family under Appendix XIV of the Code in wages and section 106 for dependants.

90. In Burma coolies must be left to group themselves into gangs and to choose their own headman (*gaung*) to whom payments should be made. Whereas here, all can read, and the wages tables and fine lists are posted on notice boards there is little, or no fear of cash, after once reaching the gang, failing to reach the individual, nor will Burmans submit to orders as to carrying and digging. The most that can be done is to calculate for each gang from the task-table the proper number of each class and warn the *gaung* that if he does not adopt this distribution of labour, his people will have harder work in completing their task. Gangs under 25 however cannot be allowed or task setting would be overpowering, as it takes as long to set a task for a small, as for a large gang. At first outbreak of a famine it may be necessary to refuse to accept gangs of under 75 or even more, as new men are very slow in calculating and setting tasks and the people, being also new to the system, waste much time in questions. The average gang towards the close of the recent famine consisted of 69 people and were in the following proportions:

Men	... ...	21·00	Workers	... ...	83·1
Women	... ...	47·70			
Children	... ...	14·40			
Infants	... ...	16·60	Non-workers	... ...	16·9
Dependants	... ...	0·30			
		100·00			100·00

91 See reply to 90.

Practically unknown.

92. Piece-work limited as proposed in reply to 85 *et seq.* requires practically the same establishments as task-work. I used the system in Madras in 1891-92 and found it work smoothly. Any other form of piece-work is open to all the objections given in paragraph 133 of the Famine Commission.

93. If "*Ordinary piece-work*" is here referred to, professionals, bachelors and people with very few dependants would flock to it, if the rates were high enough to enable a *bonâ fide* famine worker with a large family to feed them, as such people could make fortunes.

94. See Conference Report, paragraph 7, and draft rules, Chapter IV.

95. As now, but see Chapter IV of draft rules attached to Conference Report.

96. I have never known it used in over 4½ years' famine experience.

96-A. Yes. See Chapter IV of draft rules attached to Conference Report.

97. } See Conference Report, paragraph 7, and Chapter IV, draft rules.
98. }

Under 7, apparent age, no work; above 7 below 14, pay=half man's wage.

Above 11 below 14 pay=three-quarter man's wage.

Task for both = ¼ man's task.

99. As now, fine proportional to shortage of task, but I would have a minimum task as shown in task-table for use by new comers and in very hot weather—see Chapter III of draft rules.

100. Section 103, Burma Code, does not limit the fine, and it should not be limited. Fines below minimum wage are specially reported, so that they may be watched—see draft rules.

101. No.

102. No. The wage proposed is ample and there is no good getting available work eaten up too quickly.

103. Sunday's wage should be distributed over the other 6 days. This prevents people coming on Saturday for the sake of the extra wage.

Sunday *work* (voluntary) was tried in one camp during a cholera time in hopes of keeping people to the camp and preventing importation of disease, but it did not answer, as quite enough people went to their villages to destroy the safeguard, so it was discontinued.

104. Yes. See Chapter III of draft rules. This question was gone into in every camp and results carefully collected with the final result of the adoption of the table of tasks in use in the late famine. It will be seen that the formula for carriers proposed in my Preliminary Report, dated May 1896, differs considerably from that finally adopted though based on similar principles.

105. It is a question of trial. Our table of equivalent leads and lifts as finally adopted was found to work well in all camps; the initial lifting and stooping are there got over by giving all leads under 100[1] as 100[1].

106. See 104 and 105 above.

107. See 90 above. There was no difficulty in getting establishment to calculate proper proportions, but Burmans won't be driven and it takes a long time to get them to see the wisdom of adopting the calculated proportions.

108. See Chapter III of draft rules where the question is fully discussed.

112. Proportions given in answer to 90 above. They *did* vary at different times and in the separate districts but not much, and the question was fully discussed in my reports, not now before me.

113. Men went to Lower Burma. Yes; any money they may have brought back was wanted for purchase of seed-grain, plough-cattle and generally re-opening their homes.

IV.—Relations of Civil and Public Works officers in connection with the management of relief works.

114. Village relief to people who are not fit for work may necessitate petty works under civil officers, but all other works should be under Public Works Officers.

115. The Commissioner should have unlimited power, though he would of course consult the Public Works Department in professional matters.

A Collector should have no power of interference in management, except in extreme cases where he might find in his district people unwilling to go to the works and where in his opinion this was due to hard tasks or short payments or other mismanagement. Prompt action might then be necessary even to prevent loss of life to wanderers, and he should have the power of interference and action pending reference to higher Public Works Department authority.

116. The Executive Engineer should be absolutely responsible for everything in his camps and on his works; the Collector that his people know where to go for work, and that they are if necessary helped on their way, and that funds with due proportion of small coin are available at his sub-treasuries.

He should know what goes on in the camps in his district and hold enquiry into any camp management if he finds that people obviously requiring relief will not go to, or will not stay in, that camp. Briefly put, the Collector, as head of his district, must have absolute power to see that his people requiring relief are relieved properly whether on Public Works Department works or elsewhere, but a wise Collector will not interfere with the organization or administration of Public Works Department works except in cases of grave emergency, and an unwise one should not be allowed to do so.

117. No; the deputing of a Collector's powers often down even to Naib-Tahsildars in Madras in 1891-92 caused more friction and loss of energy and efficiency than any amount of hard work could compensate for.

118. Camp officers must be Public Works Department Assistant Engineers or selected subordinates. They are accustomed to organization of labour and cannot be simply tacked on the non-professional camp officers as advisers, measurers, setters-out, etc.—see Chapter I of draft rules, as the Burma system differs considerably from any in India. If officers of other Departments are available, they should be attached to the camp, and might take off a Camp Officer's hands practically everything but general control and professional matters, but the Public Works Department officer must remain responsible. It is impossible to separate "professional" from other matters (though the fallacy that this can be done appears in every Code in India—*vide* Burma Code, 77), and it is also impossible to have two heads to one camp. For charge of sections and sub-sections there was no difficulty in Burma in picking up suitable men of all classes.

119. Yes; *absolutely*, see above.

120. Yes; *absolutely*, see above. They *can* and *must*, or the evils of divided control come in.

121. No; they are better without them. Their place is the saddle and not the bench.

122. } All were under Public Works Department.
123. }

V.—Other details of management.

124. (i) Twice a week.

(ii) Twice a week, but one need only be approximate, the second being adjustment after measurement.

125. Calculate to the nearest pie, but pay to the nearest pice, so that overpayment or underpayment due to abolition of pies is under 1½ pies on a whole gang's (say 70 people) pay for three days.

126. See draft rules, Chapter I, section III. See also Conference Report, paragraph 4. See also reply 90 above.

The system worked admirably.

127. No. I see no object in it.

128. *Nil.*

129. This is fully gone into in draft rules, Chapter I, section 1, for camps, section, sub-section, etc.

130. Yes, in India. No, in Burma.

See Conference Report, paragraph 3.

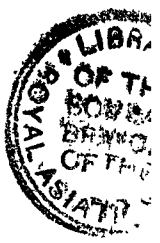
131. Small works are always expensive, but with a large work the excess cost due to famine should not be more than about—

(i) 20 per cent. on payments to labourers.

(ii) 27½ per cent. total charges including special establishment—see form G attached to Conference Report. See also the reports of separate works separately submitted as ordered by Government of India, but copies not now before me.

132. See paragraphs 10 and 12 of Conference Report; also sections VI and VII of Chapter II of draft rules and the sample forms attached. These forms were used throughout the late famine and were found efficient and simple.

VI A.—Interference with the supply of labour to private employers.



133. Not in Burma during the recent famine.

There were many such in the Madras Famine of 1891-92.

134. There never should be such complaints, with *strictly managed* works.

135. }
136. } See replies 133 and 134 above.
137. }

138. It is estimated, I believe, that more than 100,000 people more than usual went to Lower Burma for employment during the famine year, and that wages in Lower Burma were, in consequence, much lower than usual. The same thing occurred in the Kyaukse rice lands on a small scale.

The whole of these people would have had to be provided for, had it not been for this private employment.

139. In India, yes. In Burma, no.

Written answers to the Commission's questions by Mr. J. Benton, Superintending Engineer, Irrigation Division.

Questions for Burma.

14. The following table shows the anticipated additional area of rice and increase of annual outturn to be attained by the completion of feasible works:—

Name of work.	Probable total capital cost.	Increase of area of rice.	Outturn per acre.	Total outturn.	Remarks.
1	2	3	4	5	6
	Rs.	Acres.	lbs. / Tons.	Tons.	
Mandalay Canal ...	32,32,804	64,800	2,000 lbs. / 0·89 tons.		
Shwebo „ ...	44,55 919	135,000	Do.		
Môn North „ ...	27,00,000	57,243	Do.		The entries, column 4, are for rice in the husk. When it is husked 150 lbs. will give about 100 lbs. rice.
Môn South „ ...					
Yenatha „ ...	4,50,000	13,061	Do.		
Total ...	1,08,38,723	270,104	Do.	240,393	

15. The total probable capital cost would be Rs. 1,08,38,723—see column 2 of the above table.

16. If the assignment of Rs. 8,00,000 is really given and actually expended on irrigation works, the following increase is expected:—

(i) Increase of present area of 266,730 acres by 50 per cent.

(ii) Increase of present outturn per acre by 35 per cent.

Hence the total increase of outturn would be—

$\frac{150}{100} \times \frac{135}{100} = 2{\cdot}025$, say, 2 × present outturn.

The river weirs in the Kyaukse District can be greatly improved, and larger volumes of water utilized; the canals are short of requisite capacity, tortuous, and require minor extensions; a good many regulators are required to effect even distribution and the outlet system is most defective, resulting in some getting too much supply, and others too little or none. Money spent on the perennial river irrigation will yield the greater part of the increase and a return of 20 per cent. to 40 per cent. on the outlay. If these works are starved of funds what may be expected is not an increase of rice but that the works will go from bad to worse. The proposed grant of under 6 lakhs for the current year will only produce disappointment. Money expended on irrigation tanks will yield 1 per cent. to 3 per cent. in average favourable years, nothing in famine years except a lot of famine-stricken people to feed.

17. The increase of outturn is estimated to be as follows:—

Class of works.	At present.			On completion of all works.		
	Area.	Outturn per acre.	Total outturn.	Area.	Outturn per acre.	Total outturn.
	Acres.	Tons at 0·89 ton per acre.	Tons.	Acres.	Tons.	Tons.
Major works ...	...	Nil at	present. See	14 above.	...	240,393
Minor works ...	266,730	237,390	237,390	533,460	474,780	474,780
			237,390	...	...	715,173
Total ...	...	...	Increase 477,783 tons.			

Hence the increase of outturn is estimated at 477,783 tons per annum. Comparison of this quantity with that of imports from Lower Burma got in replying to question No. 4 (Burma) will show whether Upper Burma can be made independent of Lower Burma by completion of the major and minor irrigation works.

If the Burmans could be got out of the practice of growing rice or nothing, and be induced to largely raise dry crops in the dry zone, what are felt as scarcities would not be felt at all, and what are famines would become mere scarcities. The practice advocated might be brought in by relaxing taxation partially or wholly on certain crops for a term of years; what succeeded in driving the solid destructive oval cart wheels out of use and brought in circular-spoked wheels would answer in changing crop practice. Many parts of India as dry as the Upper Burma dry zone never attempt rice cultivation and still escape famine.

As to relief works.

(*General questions.*)

50. Attendance was a maximum on 7th August 1897: the number of relief works charges under Public Works Department officers was then as follows:—

Relief Works.	Meiktila.	Yegyo.	Mahline.	Taungtha.
Total attendance ...	6,447	1,140	6,482	20,083
Grand Total			34,152	

57. Relief labour was not employed on village tanks in the famine works irrigation circle.

(i) The works would generally be small ones, costly to supervise, but convenient for the people and admitting of their staying in their villages while on relief works.

(ii) The permanent benefit would be slight, as they would be dry in famine times and in ordinary cases the people can arrange to dig them for themselves if really to be a great benefit.

61. Kanna tank in the Myingyan District was the only impounding reservoir in hand.

62. They are no protection against famine and decrease the power of resistance to famine by collecting in ordinary years a considerable population, so all become famine paupers once every three or four years. New settlers and the increase of population should go elsewhere, and should not be induced to stay by tanks dependent on rainfall and liable to fail. Except Meiktila Lake, a completed work inherited from the Burmese Government, all the tanks are bad bargains in dry years and not good works at the best of times.

63. No prospect of many suitable impounding reservoir sites being found, but it is recommended that in future all impounding reservoir projects in the dry zone, Upper Burma, may be left entirely in abeyance in ordinary times and be reserved for execution in famine years. Impounding reservoirs executed in former famines have in many cases been found useless.

64. A part of the famine labour was diverted to execute piece-work on a portion of the Mandalay Canal. The expenditure was Rs. 12,853.

65. The work done was a small part of a large project costing over 32 lakhs, and the question put relates to special famine works.

66. Please see reply to No. 65.

67. The sanctioned Mandalay Canal now in hand should be used for famine labour if any famine occurs before it is completed. The Shwebo Canal has been estimated and estimate submitted to Government of India: it is a large work, costing some 44 lakhs of rupees, and is in every way suitable. Next to the Shwebo the North and South Môn Canals, Minbu District, for which the estimate will be completed by next October amounting to about 27 lakhs are suitable works also. By next October there will be sanctioned estimates or fully elaborated projects for nearly 108 lakhs of canal work ready for commencement when required.

68. The Meiktila-Myingyan Railway earthwork and ballast was the chief work on which famine labour was employed. The arrangement is believed to be that the Burma Railways Company give the value of the work at market rates.

69. The irrigation schemes referred to in replying to No. 67 furnish an ample number of large and useful public works. Leaving the people to go to the works instead of bringing works to them went on successfully in the Punjab when the Bikanir labour flocked to the Sirhind Canal and on the Western Jumna Canal where famine-stricken people went in great strength from Rajputana.

Written answers to the Commission's special questions for Burma by the Financial Commissioner, Burma.

1. The effect of the famine on the exports of rice from Burma was to direct to India a considerable quantity of rice which would ordinarily have gone elsewhere. As regards pulses the effect was not to cause an extraordinary demand for India generally, but to alter the distribution and destination in India of the quantity ordinarily taken by that country.

The comparative shipments of rice to the principal markets of the world during norma and famine periods are shown in the following table :—

Countries to which exported.	Normal year. November 1894 to October 1895.	Famine year. November 1896 to October 1897.
Foreign countries.	Tons.	Tons.
Europe	753,008	582,565
United States	1,191	...
South America	83,090	110,732
Africa and adjacent islands	1,762	3,699
Ceylon	22,456	22,391
Japan	9,473	...
Straits, China, Siam, etc.	290,152	106,525
Australia	54	20
TOTAL ...	1,161,186	825,932
India.		
Bengal	3,289	423,898
Bombay	71,128	2,12,916
Madras	68,774	46,175
Other ports in India (not British)	15,237	1,894
TOTAL ...	158,428	684,883
GRAND TOTAL ...	1,319,614	1,510,815

The above figures show that the effect of the famine in so far as concerned the exports of rice from Burma between November 1896 and October 1897 was to direct to India about 400,000 to 500,000 tons more or less, the bulk of which under ordinary circumstances would have been shipped to dutiable ports.

The exports of "other commodities," *e.g.*, cutch, teak, hides, etc., etc., showed unimportant variations.

2. Current prices of rice in the Rangoon market for each fortnight from 1st September 1896 to 1st October 1897:—

September 1896.		October 1896.		November 1896.		December 1896.		January 1897.		February 1897.		March 1897.	
1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.
370	364	357	375	377	382	402	402	400	400	390	335	312	320

April 1897.		May 1897.		June 1897.		July 1897.		August 1897.		September 1897.		October 1897.	
1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.	1st-half.	2nd-half.
330	332	332	332	355	355	352	352	362	367	365	362	270	280

Exports of rice (husked and unhusked) fro m

Countries to which exported.	1896.				
	November.	December.	January.	February.	March.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
To United Kingdom	125,639	112,543	248,756	234,268	952,702
„ Eastern Coast of Africa	...	...	19,795	4,048	3,931
„ Egypt	133,059	...	831,150	2,652,951	3,110,945
„ Mauritius	...	2,010	6,486	8,034	2,009
„ Réunion (Bourbon)	...	...	10,036	...	...
„ Seychelles	...	...	...	...	...
„ South America	...	47,282	300,458	395,809	254,813
„ Ceylon	33,361	10,301	29,196	22,715	50,282
„ Cochin China	...	...	...	...	...
„ Java	...	...	...	...	...
„ Mekran and Somniani	...	...	...	...	...
„ Persia	...	...	...	...	...
„ Siam	753	...	...	68	...
„ Straits Settlements	168,362	211,402	238,793	425,218	237,664
„ New South Wales	...	...	...	...	...
„ Bengal, Calcutta	38,230	211,925	1,033,196	606,487	1,031,718
„ Bengal, other ports	4,884	6,270	18,186	59,392	70,985
„ Bombay, Bombay	261,134	613,989	215,555	524,105	635,248
„ Madras, Madras	8,723	8,112	5,691	14,876	3,731
„ Madras, other ports	5,523	1,094	28,868	93,045	175,811
„ Allepey	...	...	...	...	15,095
„ Trivandrum	...	...	...	...	...
TOTAL ...	779,668	1,224,928	2,986,166	5,041,016	6,544,934

Burma ports to Foreign and Indian ports.

1897.							
April.	May.	June.	July.	August.	September.	October.	Total.
Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
218,941	231,405	108,176	83,347	44,120	58,576	39,616	2,458,089
3,140	2,626	...	2,008	823	2,415	4,017	42,803
559,328	480,729	518,113	338,997	260,966	244,980	62,000	9,193,218
...	...	...	...	...	...	2,008	20,547
...	...	...	...	...	...	...	10,036
...	...	...	603	...	...	...	603
140,797	189,778	205,208	117,767	276,497	127,236	159,000	2,214,645
34,984	28,708	24,434	39,184	36,426	101,893	36,326	447,810
...	6	...	...	...	...	...	6
...	...	...	...	...	...	55,999	55,999
225	...	...	...	...	...	...	225
75	...	...	...	...	...	...	75
...	602	...	21	...	...	...	1,444
105,698	132,919	89,954	45,236	39,509	77,365	300,621	2,072,741
...	...	404	...	...	...	...	404
1,212,931	1,096,757	736,253	998,043	406,766	160,163	406,731	7,939,200
85,298	119,859	97,062	30,794	21,632	7,184	17,209	538,755
325,733	296,659	234,905	328,812	204,809	324,168	293,206	4,258,323
13,523	1,102	11,388	5,971	13,317	13,006	24,304	123,744
292,831	14,287	36	21,430	7,534	30,540	128,750	799,749
6,746	...	...	...	...	...	3,901	25,742
12,138	...	...	...	...	...	...	12,138
3,012,388	2,595,437	2,025,933	2,012,213	1,312,399	1,147,526	1,533,688	30,216,296

3. For a number of years the rate of freight on rice to Calcutta was Rs. 5 per ton of 20 cwts. net. On 25th January 1897 this rate was reduced to Rs. 4. On 1st April 1897 it rose to Rs. 4-8-0 per ton net. On 21st November 1897 it again rose to the original level of Rs. 5. Since then the rate has remained unaltered.

4. Yes; the exports to Upper Burma for the five years ending 31st October 1897 are as follows:—

Years.	Tons.
1892-93	120,627
1893-94	42,421
1894-95	20,413
1895-96	93,589
1896-97	130,803

Compared with the average of the three preceding years, the rice export to Upper Burma during 1896-97 showed an increase of 151 per cent.

5. No reliable figures can be given representing surplus available for export at beginning and end of famine.

The rice crop estimates are published during five months (September to May) of each year. In 1896-97 it was estimated that 1,700,000 tons of cargo rice equivalent to 28,813,500 cwts. of cleaned rice were available for export. The actual exports for the period named were 30,216,296 cwts. It is probable that on the 1st November 1896 and the 31st October 1897 there was no surplus available for export.

6. Three annas per maund of 82⅔ lbs. is levied on all rice (husked and unhusked) exported to foreign countries and to certain foreign European possessions in India, such as Karikal, Pondicherry, etc.

7. No export duty is leviable on rice exported to British ports in India.

8. Yes; statement I appended to the Report on the Revenue Administration of Burma for the year 1896-97 shows the culturable waste other than fallow to be 16,177,699 acres, or over 25,000 square miles in Lower Burma. Rice would be practically the only crop on this area if it were brought under cultivation.

9. Yes. The area has increased 21 per cent. since 1892-93: the population is believed to have increased only 12 per cent.; therefore the increase in area is proportionately greater than the increase in demand for local consumption.

10. Its removal would hardly produce an appreciable effect.

11. Rice is carried to the seaboard mainly in country boats. The amount carried by rail to Rangoon (the only seaboard port with a railway) during the past three years is as follows:

Year.	Tons.
1895	266,434
1896	244,977
1897	277,016

The total amount exported by sea for all ports in Burma in 1897-98 was over 1,500,000 tons.

12. The rates varied from 9 pies per ton per mile for short distances to 2·7 pies per ton per mile for long distances. The rates were not reduced during the period of scarcity.

13. The programmes of relief works submitted by some of the districts in Lower Burma contain many road schemes. The general opinion of District Officers is evidently that a very great deal can be effected by a more complete system of communications. The difficulty is however not so much in stimulating cultivation as in keeping pace with it.

14. The following table shows the anticipated additional area of rice and increase of annual outturn to be attained by the completion of feasible works:—

1	2	3	4	5	6
Name of work.	Probable total capital cost.	Increase of area of rice.	Outturn per acre.	Total outturn.	Remarks.
	Rs.	Acres.	lbs. Tons.	Tons.	
Mandalay Canal ...	32,32,864	64,800	*2,000 lbs.* 0·89 tons.		The entries in column 4 are for rice in the husk: when it is husked 150 lbs. will give about 100 lbs. rice.
Shwebo	44,55,919	135,000	Do.		
Môn North	27,00,000	57,243	Do.		
„ South					
Yenatha	4,50,000	13,061	Do.		
Total ...	1,08,38,723	270,104	Do.	240,393	

15. See under 14.

16. If the assignment of Rs. 8,00,000 is really given and actually expended on irrigation works, the following increase is expected :—

(i) Increase of present area of 266,730 acres by 50 per cent.

(ii) Increase of present outturn per acre by 35 per cent.

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Hence the total increase of outturn would be—

$\frac{150}{100} \times \frac{135}{100} = 2{,}025$, say 2 × present outturn on 266,730 acres.

266,730 acres at ·44 of a ton per acre. Increase = 117,361 tons.

The river weirs in the Kyaukse District can be greatly improved, and larger volume of water utilized. The canals are short of requisite capacity, tortuous and require minor extensions; a good many regulators are required to effect even distribution and the outlet system is most defective, resulting in some getting too much supply and others too little or none. Money spent on perennial river irrigation will yield the greater part of the increase and a return of 20 to 40 per cent. on the outlay.

17. No. The area affected during the recent famine would for example not be completely protected by the proposed major or minor works.

Answer to Question No. 207:

There were no suspensions and no remissions of land revenue* proper in the parts of the province affected by the late famine, as land revenue* throughout these tracts has hitherto been assessed on cropped areas only and is therefore self-adjusting. Thathameda collections were, however, less by some 17½ lakhs owing to reductions of rate and remissions granted on account of the scarcity.

* *N.B.*—This term (land revenue) means the "rent" of State lands, as up to the present time non-State lands have not been directly assessed to revenue. The non-State lands pay revenue indirectly in the form of thathameda.

Questions drawn up by the Commission for the guidance of witnesses.

As to the extent and severity of the distress.

1. In your $\frac{\text{province}}{\text{district}}$ what was the area affected and its population ?

2. To what was the distress due ? To local failure of the rains and of the harvests, or to abnormally high prices, or both ?

3. (*a*) Describe the extent to which the rains and the harvests dependent on them failed, as compared with the normal state of things.

(*b*) Were prices of food-grains much higher than in other years ? Were they as high as, or higher than those experienced in past famines ?

4. Up to the time of the failure of the rains, what had been the condition of the affected area ? Had preceding seasons been favourable or the reverse ?

5. Under normal circumstances may the population of the affected area be considered to enjoy a fair measure of material well-being ? Is there any section of the population in it which from special causes is ordinarily in an unsatisfactory and precarious condition ? Is it relatively large ?

6. Is the agriculture of the affected area specially dependent on timely and sufficient rain, owing to any peculiarities of soil, crops, absence of facilities for irrigation, or the like ?

7. To what extent has the population of the affected area reserves of money or food for its support in the event of failure of one or more consecutive harvests ? What sections of the population have not such reserves, and what proportion of the total population of the affected area is so situated ?

8. How does the late distress compare in respect of its extent and severity with that experienced in any other famine of recent years in the same locality ?

9. Is there any reason to suppose that the extent of crop failure, or the degree of distress, or the absence of resources on the part of the people, was under-estimated or over-estimated on the present occasion at any point of time ? If this was the case, did it affect the character or amount of relief provided ?

As to the sufficiency and economy of the relief measures.

10. The Famine Commission of 1879 appear to have held the opinion that the number of persons on relief in the worst months of a famine ought not to exceed 15 per cent. of the population of the affected tract (paragraph 75). Does this standard coincide with your experience ? Is it liable to be exceeded in particular tracts, while being a fairly correct standard of relief as applied to the whole of the affected area in a province, some portions of which would be less distressed than others ?

11. How do the relief figures of your $\frac{\text{province}}{\text{district}}$ in the late famine compare with the standard of the Famine Commission ? If there are cases in which the standard was largely departed from, can you account for them ?

12. Having regard to what you consider to be a fair standard of relief under given conditions, do you think that in any part of your $\frac{\text{province}}{\text{district}}$ the proportion of the total population relieved was larger than was necessary to prevent loss of life or severe suffering ? Were persons relieved who were not really in need of relief ? And, if so, to what do you attribute this ?

13. On the other hand, were there any cases in which a larger proportion of the population might have been relieved consistently with the object of saving life and preventing great suffering ? If so, what was the reason ? Was it due to the attitude of the people themselves, or to defective or insufficient or ill-adapted relief arrangements ?

14. If the relief arrangements were defective, insufficient or ill-adapted in any cases, was the cause of this circumstance avoidable or not ?

15. Judged by the mortality of the famine period, has the relief given been successful in its object ? If the mortality has been in excess of the normal, is there reason to think that this might have been prevented by more extensive or more timely relief measures ?

16. Were any changes made at any point of time in the scheme of relief which was followed by a large decrease or increase in the numbers on relief ? Do you consider that such increase or decrease was a direct or indirect result of such changes, and that they had the effect of excluding from relief persons really in need, or of bringing on to relief persons who did not really require relief ?

17. Can any connection between such changes of system and the death-rate be traced ?

18. The Famine Commission (paragraph 111) considered that the best safeguard against profusion on the one hand and insufficient assistance on the other was to be found in prescribing self-acting tests by which necessity may be proved. Do you consider that this principle has been observed to the fullest practicable extent in the late famine, so far as your experience goes ?

19. The chief test was held by the Commission (paragraph 111) to be the exaction of labour from all those from whom labour can reasonably be required, the labour being in each case commensurate with the labourer's powers, and the wage not being more than sufficient for the purpose of maintenance. In the late famine, were all persons who could do a reasonable amount of work required to work as a condition of receiving relief?

20. The phrase "who can do a reasonable amount of work" was intended by the Famine Commission (paragraphs 133 and 146) to include women and children, so far as they are healthy and capable of labour. Have these classes of persons been subjected to the labour test in your province?

21. The Famine Commission (paragraph 111) considered that if this principle be observed, the numbers of destitute persons to whom the test of labour could not be applied would be "comparatively small." What has been your experience in the late famine as to the numbers of persons relieved, otherwise than through the operation of a labour test, in comparison with (1) the total population of the affected tract; (2) the numbers relieved on works. Have they been comparatively small? If not, what is the explanation?

22. With regard to the labour-test, have the conditions of the task and the wage been such as to constitute a stringent test of necessity? Has the task been a full one, considered with reference to the working capacity of each person? Has the wage been more than a bare subsistence wage, regard being had to the fact that it was open to the several members of a family to obtain separate relief.

23. The Famine Commission (paragraphs 128 and 146) while objecting to a "distance test," as a condition precedent to a person being received on a relief work, considered that one large work in each sub-division would prove sufficient, and that most of the workers would find it necessary to reside on the work. Have the relief works been more numerous than this, and have the workers as a rule resided on them or not? Is residence upon a relief work disliked by the people, and does it constitute an effective and a fair test of necessity?

24. Can you give statistics, showing the highest percentages on the total population of persons relieved on works ("dependants" being excluded) attained in the period or periods of maximum pressure?

25. How do these percentages compare with those attained in previous famines? If they are considerably higher, what is the explanation?

26. It has been alleged that in the present famine the people have resorted to relief works with greater eagerness and at an earlier stage of distress than in previous famines. Is this your experience, and, if so, do you consider this due to the greater liberality of the terms of relief as compared with those in force in former famines, or can you assign any other reason?

27. Was "gratuitous relief" mainly given through the medium of poor-houses in which residence is a condition of relief, or in the form of cooked food in kitchens where residence was not a condition of relief, or by means of doles of grain or of money to persons in their homes?

28. The Famine Commission (paragraph 140) recognised that the "village system," or the grant of relief in the homes of the people, involved "the risk of a too free grant of relief." Do you consider that the risk was effectually prevented, and that gratuitous home relief was strictly confined to persons who were in real want and who belonged to the classes specified in your Code?

29. Has gratuitous home relief been given more largely and at an earlier date in this than in any former scarcity? If so, give the reason and say whether the change has been beneficial. Has it saved lives and kept villages and households together? On the other hand, has it in any way demoralised the people, by making them more ready to accept charity, or by weakening the moral obligation of mutual assistance?

30. State the gross cost of direct famine relief in your $\frac{\text{province}}{\text{district}}$. State the number of persons relieved (in terms of units of one day's relief), and the cost of relief per unit. Compare the cost with the cost of relief in previous famines. Having regard to the comparative severity of the late distress, has relief been economically administered on the present occasion?

31. What indirect relief, in the form of loans or suspensions and remissions of land revenue, has been given? Can you say how the amount of such relief compares with similar relief given in former famines?

32. What is the net result of the famine, alleviated as it has been by relief measures, on the economic condition of the population of the $\frac{\text{province}}{\text{district}}$, distinguishing between the land-owning class, the cultivating non-proprietary class, the agricultural labourers, and the trading and artizan classes? Have these classes respectively been permanently injured, or will they speedily recover their former position?

33. Is there any important matter in which the scheme of relief measures prescribed by the Code is seriously defective, or fails to meet the requirements of a particular class or particular classes of the community ?

As to the arrangements existing for ascertaining the imminence of scarcity.

34. Do you consider that the arrangements existing in your province for ascertaining and reporting failure of rainfall and crops are sufficient ? Can you suggest any improvement on them ?

35. If no revenue village organisation, such as patwaris, is maintained by the State in your province, how is information as to the cropped area and the condition of the crops ascertained ?

36. Can the crop-returns be relied on as regards (1) the area and kinds of crops actually sown : (2) the extent to which sowings have failed : (3) the condition of the crops ?

37. Are the returns obtained within a sufficiently early date after the crops have been sown to be a guide, when distress is apprehended, to the extent of the apprehended distress.

38. In the late famine were the relief arrangements of each district largely based on the agricultural information given by these returns ?

As to the extent to which the prescriptions of the Provincial Famine Code have been departed from or have been found to be unsuitable.

39. Please describe each different measure of State relief used during the late famine or scarcity in your (province, district or charge, according to the grade or status of the witness) ? What measures of private relief were also in operation ?

40. What opportunities did you have of gaining a practical knowledge or experience of the working of these measures ?

41. Which, if any, of these measures were not Code measures, *i.e.*, not authorised by the local Famine Code as it stood before the famine began ?

42. Were any of the Code measures not used in the late famine, or abandoned after trial ?

43. In working Code measures of relief, what material departures were made in practice from the detailed provisions provided for such measure in the local Code ? Please to answer this separately for each measure, and explain the reasons for the departures, and give your opinion as to their sufficiency.

44. State the comparative advantages and disadvantages of each measure you have seen used (A) primarily with regard to relief of distress and saving of human life, (B) secondarily with regard to economy.

45. Can you suggest any improvement of the measures you have seen used, or any other measures which you think ought to have been used; or which ought to be tried in the case of future famines or scarcities ?

46. State the particular combination of measures which you would recommend, with regard to both the considerations mentioned in the penultimate question for the tract liable to famine which you know best.

47. If you know any other tract or tracts liable to famine for which some other combination would be better, please describe those tracts, and the combinations you have in mind.

48. Which measures were most approved by the general opinion (A) of the different classes in distress ; (B) of the intelligent natives not themselves in need of relief ?

49. Have you any other criticisms to express on the measures of relief used in the recent famine ; or any other recommendations or opinions to advance which you think may prove useful in the case of future famines ?

As to relief works.

I.—Extent to which works of public utility may be available as relief works.

*50. State the number of relief works charges under the Public Works Department and Civil Officers, respectively, at the time when attendance on relief works was a maximum,

NOTE —Questions marked with an asterisk (*) may be answered by one officer specially deputed for the purpose, or if the Local Government prefers, the information may be given in the final famine report of the province.

under each of the following classes ;—

(*a*) Roads.

(*b*) Village tanks.

(*c*) Impounding reservoirs.

(*d*) Canals.

(*e*) Railways or tramroads.

(*f*) Miscellaneous works.

*51. What was the total length in miles of new roads constructed as famine relief works—

(i) unmetalled,

(ii) metalled.

52. What do you estimate as the average number of day units of labour that can be employed per mile of each class of road, the work in the case of (ii) including the collection and consolidation of metalling and collection of a reserve supply for five years?

53. Do you think that all the roads constructed as relief works will be of permanent service to the community, and that they will be effectively maintained in future, or that they will probably be abandoned as soon as they fall into disrepair ?

54. If the roads now constructed are all regularly maintained, do you consider that there will still be room for new roads, should it be necessary a few years hence to open relief works ; and if so, what length of new roads could be proposed in the districts principally affected in the late famine ?

55. What is your opinion of the value of metal collection as a means of employment of relief labour ?

56. Has metal been collected for existing or projected roads in the late famine in excess of probable requirements for the next five or ten years ?

57. What is your opinion of the value of village tanks as a form of relief work —

(i) As a means of employment of relief labour ;

(ii) As a means of permanently benefiting the villages in which they are constructed ?

*58. What is the total number of village tanks that have been excavated or deepened or enlarged as relief works under Public Works and Civil agency, and the approximate number of day units employed ?

59. What was the average number of workers for whom employment could daily be provided in a satisfactory way on an ordinary village tank ? Can you make any suggestion for securing strict supervision over small and necessarily scattered tank works, or for preventing the whole population of the village from applying for work on the tank because it is at their doors ?

60. Has the number of possible village tanks been exhausted by the recent famine works or can we rely upon again being able to employ large numbers on such works on the recurrence of famine, say within 20 years ?

61. In what districts have impounding reservoirs been constructed ?

62. Can such works in these districts be regarded as in any way a protection against famine, or as increasing the powers of resistance against famine of the community for whose benefit they are constructed ?

63. Is there a prospect that many impounding reservoirs could be advantageously constructed in these districts as relief works in future famines, if projects were deliberately investigated beforehand, and on the assumption that the cost of their construction must in any case be expended in some form or another, for the purpose of relieving distress ?

*64. What irrigation works, other than impounding reservoirs, have been constructed as relief works during the late famine, and what has been the approximate expenditure incurred on them as relief works ?

*65. What expenditure will be required on them, on subheads of construction (such as land, masonry works, etc.) that are of little use for purposes of relief works, before the works can be completed and made available for irrigation ?

*66. What is the area that these works may be expected to irrigate usually in ordinary years, and will the area that may be anticipated in years of drought be greater or less than may be expected in ordinary years ?

If any such works were constructed in former famines, have the anticipations of their utility been fulfilled ?

67. Do you know of any irrigation projects that can be usefully investigated with the object of providing employment for relief labour in future famines, and with the prospect that the cost of maintenance will be covered by an increase in the revenue that may be attributable, either directly or indirectly, to the works proposed?

*68. Under what arrangements with the Railway administration interested have feeder railways or tramways been undertaken as relief works?

*69. Generally, do you think it would be possible, after careful investigation by competent officers, to prepare a programme of large and useful public works that might be put in hand in future famines in preference to petty works, such as have been carried out during the recent famine, the conditions being—

(*a*) That much of the expenditure on such portions of the work as can be carried out by relief labour will have to be incurred in any case for the purpose of affording adequate relief to the distressed population, and that, if not incurred on the works proposed, will be incurred on others of a less useful character.

(*b*) That the cost of future maintenance of the work will either be covered by the gross revenue that may be expected from it, or, if the work will not produce revenue, will not be out of proportion to the public benefits anticipated from its construction, or beyond the means of the authority that will be responsible for such maintenance.

(*c*) That the completion of the work will not involve an expenditure on materials or other items out of all proportion to the expenditure to be incurred on items that can be carried out by relief works, except when the work, as a whole, is likely to prove remunerative, or when its execution sooner or later has been decided on in the interests of the public, and without reference to the necessity for providing employment for relief labourers.

70. What are the provisions of the Provincial Famine Code regarding the maintenance of a programme in each district of famine relief works, with sanctioned plans and estimates? Has the Code been in practice observed, and were plans and estimates for the works entered in the district programmes ready prepared when distress appeared? If plans and estimates were not ready, what was the reason?

II.—As to large and small works, and the distance test.

71. What, in your opinion, is the greatest distance at which the distressed inhabitants of a village may be induced to attend relief works—

(*a*) when they return every night to their villages?

(*b*) when accommodation is provided on the relief works?

72. Do you think it would be practicable to withhold relief from all fairly able-bodied labourers who refused to attend relief works at the distances stated in reply to the last question?

73. Would you recommend conveying relief labourers long distances of over 100 miles by rail or steamer to any large public works on which there is a strong demand for labour, or on which their labour could be very usefully employed, in preference to employing them near to their own homes on petty works of little use to any one, and the construction of which would never be contemplated, except for the purpose of affording employment for distressed labourers?

74. In the late famine has residence on the works been the rule or the exception?

75. Has residence been made a definite condition of relief, or has it incidentally resulted from the small number of relief works open and the distance of them from the homes of the majority of the workers?

76. Are you in favour of making residence obligatory, or of indirectly inducing it by concentrating the works? Have you any evidence that when such a test is not enforced, the relief works attract many persons not actually requiring relief? Do you consider that a high task and low rate of wage are in themselves sufficient tests?

77. Is residence on the works so distasteful to the people that they will undergo extreme privation before they submit to it? Can you point to any instances in which this feeling has prevented relief offered under condition of residence from being effectual? Or any in which it has passed away or become less intense after a short trial?

77-A. Within your own observation is the objection to go long distances for work or to reside on relief works so strong in particular localities or with particular tribes or castes as to prevent relief offered under such conditions from being effective?

78. If famine were widespread in the province, would the disposable establishments be large enough to supervise works so numerous and so arranged as to allow the majority of the workers to return daily to their homes?

79. To enable relief workers to come to a relief work daily from homes several miles distant and yet to earn the full famine wage, have reductions for "distance" been made in the task of such persons? Refer the Commission to the rules (if any) on the subject, and explain how they were worked. Were such "reductions" allowed when hutting accommodation was provided on the works? What precautions were possible to prevent distance being overstated, especially in the case of those who did not return to their homes every night, but found shelter in adjacent villages?

80. What was the cost of hutting accommodation per worker?

81. Did the cold and discomfort attendant on residence on the works affect the health of the people?

82. Was it necessary to provide blankets and bedding for the people in consequence of residence being enforced?

83. Is the proportion of "dependants" relieved on the relief works less when works are small and numerous than when they are large and few? How do you account for this?

*III.—Task-work and piece-work.**

84. What was the proportion of labourers employed on task-work and piece-work, respectively, on the relief works under your charge, during the late famine?

85. Are you of opinion that piece-work is suitable for the employment of relief labourers in all cases?

86. If not in all cases, do you think that it is suitable in any? If so, specify the conditions under which you would generally recommend its introduction.

87. Do you consider the objections taken by the Famine Commission (paragraph 133) to piece-work as the predominant form of relief on works are overstated, or can be removed or lessened by administrative expedients? Or that they are on the whole less important than those which in your experience may be urged against task-work?

88. What arrangements would you recommend on works carried out under the piece-work system for labourers who might be too weak or incompetent to earn a subsistence wage at the rates offered, but are nevertheless not sufficiently helpless to be proper recipients of gratuitous relief, either on the works or in their own villages?

89. Would you propose any arrangements limiting the amounts to be earned on piece-work by expert and able-bodied labourers who might be able to execute far higher tasks than those assumed as the basis for the piece-work rates? If so, state what arrangements you would propose.

90. What is the size of the party to which you would make single payments for the work done, *e.g.*, in the case of earthwork how many diggers, with their own complement of carriers, would you put into one gang, or what would be the average number of diggers and carriers together forming a gang, and to whom a single payment should be made?

91. Are you of opinion that if payment for work done is made to the head of such a gang, as is referred to in the previous question, the amount paid will fairly be distributed by him among the members of the gang? Have complaints of unequal or unfair distribution been common when this system has been adopted?

92. Can you give any idea of the reduction that may be made, both in numbers and cost of special establishment, by the substitution of piece-work for task-work?

93. Do you think there would generally be any difficulty in inducing the people to attend works on the piece-work system if works on the task-work system have not been previously opened?

94. What is in your opinion the most convenient system of classifying relief labourers when employed on task-work?

95. What wage would you propose for each class in terms of the grain staple in general consumption by the classes from which labourers are drawn, expressed in *chataks*?

96. Is it necessary to maintain the alternative system given in the Famine Codes under which wages may be calculated according to the cost of the component parts of a day's ration?

96-A. Would you propose a different task and wage for men and women within the same class?

97. How would you classify task and remunerate children—

(i) Above 12 years of age.

(ii) Below ditto.

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* It is desirable that the witnesses should have read the recommendations contained in Mr. Higham's Final Note. Questions 84 to 93 are intended only for witnesses who have had experience of piece-work.

98. What do you consider the minimum age at which children should be employed as workers?

99. What penalties would you propose for labourers who fail to perform the task set them, and how would you enforce them?

100. Are the present restrictions as to fining below the minimum wage necessary or expedient?

101. Have considerable bodies of relief workers been on the minimum or D wage for a continuous period? Has it resulted in enfeebled health?

102. Are you in favour of allowing all labourers to earn something in addition to the normal wage proposed in your reply to question 12 in the performance of a task in excess of the normal?

103. Are you in favour of paying a wage on Sundays, or one rest day in seven, and if allowed, what condition as to previous attendance would you propose as entitling to a rest-day wage?

104. Do you consider it possible to introduce a standard task for all carriers as suggested in paragraphs 9 and 10 and in Appendix I of Mr. Higham's Report on the Management of Relief Works?

105. Do you think that the formula proposed in Appendix I of Mr. Higham's Report for determining a *reduced level* in which allowance is made for the initial effort in each trip, for the vertical lift, and for the actual horizontal level is one that may be generally accepted for the purpose of a measure of the work done by carries. If not, what modification of the formula would you propose?

106. Assuming that the reduced level is calculated as proposed in Mr. Higham's formula, or in any modified form of it that you may prefer, what is the *duty* that you would assign to an ordinary famine carrier, the *duty* being the number of cubic feet carried in a day multiplied by the reduced level in lineal feet, the value suggested by Mr. Higham being 10,000?

107. Do you think it possible to instruct the work establishment ordinarily available on relief works to arrange for the disposition of labour so as to secure, at all times, the best proportion of carriers to diggers, that may be possible under the circumstances; diggers being made to carry when the proportion of carriers is too low, and carriers being as far as possible employed in digging, even with reduced tasks, when carriers are in excess?

108. What is in your opinion the best unit for task work, that is, the size of the party to whom a given task is allotted and all the members of wh ch should be liable to fine if the task is not performed?

109. Do you know anything of what is called the Blackwood system, and do you consider it preferable to ordinary task-work or to piece-work? If so, state your reasons?

(For Bengal only.)

110. Have you had an experience in what has been called the modified intermediate system, and if so, do you consider it preferable to task-work under the system laid down in North-Western Provinces Circular No. 18, dated 5th December 1896, or to piece-work in which payment is made to the head of a working party simply with reference to the quantity of work done, and without any reference whatever to the constitution of the party?

(North-Western Provinces only.)

111. If you consider this system preferable to the others, would you advocate its adoption on all relief works, whatever the degree of the distress? If you consider it inapplicable in districts in which the distress is very acute, please state your reasons?

Ditto.

112. In what proportion have the adult male workers stood to the women and children? Has it varied greatly in different districts and in the same district at different periods? Has the proportion differed in the same district and at the same point of time on task-work and piece-work?

113. Can you account for the great preponderance of women and children on the relief works when these exceeded two-thirds of the whole number? Did the adult males find private employment at wages in excess of the famine wage? If so, was it really necessary for the State to support their wives and children?

113-A. When failure of crops has caused great rise of prices and expectation of famine in a district, but its circumstances are such as not to justify the opening of relief works, or even of test works, is it good policy to at once arrange for special employment of labour by the Public Works Department on ordinary terms? Would such action enable large numbers of labourers to retain longer their independence and their full working power, and in that way would it stave off the time when large numbers become so pinched that private charity and mutual help cease, and famine relief becomes a necessity?

113-B. After a famine has been ended by good crops and a fall of prices, is it sometimes advisable to make provision for special employment of labour by the Public Works Department on ordinary terms in order to assist the very poor who have been left without resources, till a continuance of better times has completely restored them to their normal condition?

113-C. Under existing rules of account would expenditure incurred in the cases and under the conditions described in the two preceding questions be met from the budget provision for ordinary public works, or would it be charged to Famine Relief?

113-D. Have you any suggestions to make with a view to giving more precision to the summary of "Principles for regulating expenditure upon public works in time of famine" circulated to Local Governments by the Government of India's Famine Circular No. 16—104-1-F., dated 13th February 1897, or have you any criticisms to offer?

IV.—Relations of Civil and Public Works Officers in connection with the management of relief works.

114. Can you define the classes of relief works which may in your opinion be most conveniently carried out by Civil and Public Works officers respectively?

115. What powers of control, if any, do you think should be exercised by the Collector and Commissioner, respectively, in regard to the management of relief works which have been entrusted to the Public Works Department?

116. In the case of such works what are the matters for which in your opinion, the Collector and the Executive Engineer, respectively, should be held responsible?

117. Do you think it desirable that any powers of control reserved to the Collector in the case of works carried out under the agency of the Public Works Department should be delegated to or exercised by his Assistant?

118. What class or classes of men do you think most suitable as officers in charge of a relief work camp, it being assumed that the services of all available Public Works officers and subordinates are required for setting out and supervising the work, conducting and checking the measurements, etc., and on the general duties of inspection and control?

119. Do you consider that the officers in charge should, in the case of works carried out by the agency of the Public Works Department, be placed under the direct orders of the officers of that Department?

120. Do you think that the officers of the Public Works Department, who are responsible for the execution and inspection of relief works, can or should also undertake the control of all other matters within the relief camp, such as the payment of labour, the conservancy arrangements, the management of kitchens, bazar arrangements, etc.?

121. Do you think it necessary or desirable that either the officers in charge of relief camps, or the inspecting or controlling officers, should be vested with magisterial powers for the maintenance of order in the camp, and if so, to what extent?

122. Was there any essential difference between the systems of management adopted on works under Public Works and those under Civil Agency?

123. Do you consider that any of the works carried out by the Civil officers might, with advantage, have been transferred to the Public Works Department, or *vice versâ*, that any works were carried out by the Public Works Department that should have been left in the hands of the civil authorities?

V.—Other details of management.

*124. At what intervals do you consider that the payments of wages should be made—

(i) To labourers on task-work?

(ii) To those on piece-work?

*125. In the case of task-work, would you adopt the *pice* unit for payments, or pay to the nearest pie, as worked out by the Ready Reckoner?

*126. Do you recommend that payments should be made by independent cashiers or by the gang muharrirs?

127. Has it been the practice in any works to require *chalan* from civil or village officers before admitting new-comers to the works, and if so, do you consider it a desirable practice? What was done in such cases with labourers presenting themselves without a *chalan*?

128. What is your experience in regard to members of aboriginal hill tribes?

(i) Has there been much difficulty in inducing them to attend the works?

NOTE.—Questions marked* may be answered by one officer specially deputed for the purpose, or if the Local Government prefers, the information may be given in the final famine report of the province, or in reply to the Government of India's Resolution (Revenue) No. 31, dated 25th October 1897, recorded on Mr. Higham's Report.

(ii) When on the works, have they worked steadily, carried out their tasks and been amenable to discipline?

129. What are the maximum and minimum number of labourers that should form a single charge?

130. Are you in favour of kitchens in all cases in which relief is given to non-working children? If not, under what circumstances would you recommend cash doles?

*131. What do you consider, as a result of your experience, may be considered a fair ratio to the value of the work done if performed by ordinary labour at the ordinary rates of—

(i) the payments actually made to the labourers employed, including the Sunday or rest-day wage;

(ii) the total cost of the work including relief to dependants and all incidental charges;

and support your opinion by statements showing the general results of all the operations under your charge?

*132. Have you any suggestions to make on the question of famine accounts and returns?

VI-A.—Interference with the supply of labour to private employers.

133. Have you received any complaints from the agents of railway or other public companies, contractors, planters, or other private employers that the opening of relief works affected the supply of labour which they were desirous of employing? If so, give particulars of the complaints.

(For Government officers only.)

134. Did you think there was any foundation for any of these complaints, and if so, was it possible to do anything to meet them?

135. Were the wages or the rates per unit of work done paid by such employers in excess of the normal wages and rates in ordinary seasons, or did they follow in any way the rise in the price of grain?

136. Do you think the rates paid by the employers were insufficient to enable an ordinary able-bodied family accustomed to labouring on works to earn a bare subsistence at the market rates for grain that obtained?

137. What arrangements, if any, would you propose in future famines to prevent relief works attracting labour that would otherwise go to private employers?

138. Can you say if relief operations were assisted in any way by the employment offered by private employers of all classes to able-bodied workers in their immediate neighbourhood other than professional earth-workers? Are you aware whether any works were undertaken by them with this purpose which but for the existence of distress would have been postponed to more later date, or whether any special efforts were made or facilities afforded with the object of assisting in the relief of distress?

139. Do you think it would be possible in future famines to utilize the agency of private employers in any way for the purpose of providing more extensive employment for the distressed?

VI-B.—Interference with the supply of labour to private employers.

140. Do you consider that the supply of labour to the works under your control was injuriously affected by the opening of relief works in the neighbourhood or at a distance?

(For employers of labour only.)

141. Did you find it necessary to revise your rates after relief works had been opened? If so, give particulars of the rates before and after the opening of relief works, and compare them with those that you have paid in ordinary seasons for the same class of work.

142. How far from your own works were the relief works which you consider interfered with the supply of labour?

143. Have you made any complaints on the subject to any of the officers connected with relief works, and if so, with what result?

144. Do you consider that the establishment of the relief works complained of was necessary as a means of preserving life or that without them the people who attend them could have found sufficient employment in your own works and elsewhere to earn at least a bare subsistence for themselves and their dependants?

145. If you consider that Government relief of some kind was necessary, do you think it would have sufficed to give it in some other form than relief works, or to

have opened relief works on a different principle from that actually followed? If so, state your views on these points.

146. Do you think that it would have been possible to employ local labour in distressed districts upon works under your control, and to have obviated the necessity for Government relief works in the neighbourhood, if Government could have made arrangements for the sale of grain to all labourers on your works at privileged rates considerably below the market rate?

See paragraph 12 of Mr. Higham's notes on Central Provinces.

147. Have you any other remarks on the subject of relief works that you would like to lay before the Commission?

As to Gratuitous Relief.

148. What percentage of the population of the affected area was placed on gratuitous relief at the period of maximum pressure?

149. Did the persons so relieved mainly belong to the agricultural classes resident in rural areas?

150. Do you consider that all the persons thus relieved were incapable of work on a relief work, and were without relatives bound and able to support them, and had no resources of any kind?

151. In ordinary years how are such persons supported, and why should famine or scarcity throw them upon the State for support?

152. Were the persons who received gratuitous relief in their homes chiefly women and children? To what extent did the women belong to the *parda nashin* class?

153. Can any reliable estimate be formed for a given tract of the number of persons requiring gratuitous relief in their homes during an acute famine? Will the numbers vary with the severity and stage of the distress?

154. If the numbers of relief-workers attending the relief works open in a district are small, may it be presumed that no great amount of gratuitous relief is required?

155. In some provinces it appears to have been the practice to require the incapable poor who had able-bodied relatives to accompany the latter to the relief works and there to remain as "dependants." Do you approve of this practice as a test of necessity?

156. Would you give gratuitous relief to an incapable person having an able-bodied relative bound to support him, who declines to go on to the relief work?

157. May it be presumed that gratuitous relief at home is very popular with the people, and that is sought for by many who are not absolutely destitute or who are capable of labour on the relief works?

158. Was the circle and inspection organization at your disposal sufficiently strong, vigilant, and well-informed to restrict gratuitous relief to those who were incapable of work and would otherwise have starved? Describe the precautions taken.

159. Do you think that the successful administration of this form of relief requires a larger staff of supervising officers in the superior grades than any other kind of relief?

160. Does the acceptance of such relief place any social or caste stigma upon the recipient?

161. Does the knowledge that gratuitous relief is given by the State lead to the drying up of private and village charity quicker than would otherwise be the case, and tend to make the people cast their customary obligations for the support of the poor of the locality upon the State?

162. Could some of the persons to whom gratuitous relief was given have been employed on light manual labour on relief works in or near their village?

163. Could such work have been provided by assisting the land-owners of the village to undertake the construction of tanks or roads or other village works?

164. Central kitchens, where cooked food is provided for all comers without any condition as to residence, have by some officers been preferred to gratuitous relief in the homes of the people, at least in the early stages of distress, or when distress is on the wane. What is your opinion on this point?

165. What are the social and caste feelings of the people as to receiving cooked food in State kitchens? Would the substitution of kitchens for gratuitous relief in the form of grain or money doles practically exclude on account of these sentiments certain classes from relief who really need it?

166. Apart from the sentimental difficulty, would it be practicable to maintain a sufficient number of kitchens so as to be within the reach of all persons requiring gratuitous relief?

167. Was gratuitous relief given in the form of grain or of money? Which form do you prefer?

168. Was it given in the actual homes of the people, or were they required to repair periodically to a central place to receive it?

169. Within your observations was there much malversation or extortion on the part of patwaris or other subordinates employed in the distribution of gratuitous relief? Were there any instances in which persons paid money, or surrendered part of the dole, in order to be placed on the gratuitous list?

170. To what extent was the existing revenue or police organisation by villages or larger groups utilised in ascertaining the persons requiring home relief and afterwards in distributing such relief, and how far had it to be superseded or supplemented?

171. To what extent was gratuitous relief administered through voluntary unofficial agency?

As to Poor-houses.

172. Was the population of the poor-houses in your $\frac{\text{province}}{\text{district}}$ large at any point of time, or continuously so throughout the famine period?

173. From what classes of the community were the inmates chiefly drawn?

174. Did persons of the better castes or of respectable position object to resort to the poor-houses for relief? Would any degree of pressure have induced them to go there?

175. Compared with any experience you may have had in former famines, do you think the people generally showed decreased reluctance in the late famine to accept poor-house relief? If so, to what do you attribute this?

176. Was the mortality of the poor-house population exceptionally high throughout the period, or in any particular months? Can you account for this?

177. To what extent were the inmates of the poor-houses persons who had wandered from other districts within the province, or from other provinces, or from Native States?

178. From the physical condition of the persons entering the poor-houses and the distances they had come, what opinion did you form as to the severity of the famine, and the degree to which it had broken up households and caused wandering?

179. Were any measures taken to keep down the population of the poor-houses by drafting to works or to their homes all who could properly be thus disposed of? Was this systematically or spasmodically done?

180. Is the poor-house ration prescribed by the Famine Code sufficient? Had the dietary to be varied in the case of weak and sickly persons?

181. Are the rules and appendices of the Famine Code as to the management of poor-houses sufficiently explicit and detailed, and in all respects suitable? Can you point out any defects in them and suggest improvements?

182. Are legal powers required to enable relief officers or district authorities to send persons found begging and wanderers without any means of support and persons who, being able, refuse to work at the relief works to poor-houses, and to detain them there? Was compulsion in this direction in practice used?

183. Were endeavours made to get work out of poor-house inmates, and with what degree of success?

184. Had any compulsion to be used to detain persons in the poor-houses? Were the inmates free to leave when they chose? Were the departures or escapes numerous?

As to Relief Centres.

185. Was it found necessary to open relief centres where doles of grain or money were distributed as an alternative to giving similar relief in the homes of the people? Under what circumstances was this necessary?

186. When relief centres were thus established, was work exacted as a condition of relief from able-bodied persons? What kind of work was exacted?

187. Did the attendance at relief centres tend to become unmanageably large? Was the collection of large numbers of persons at such centres found to be productive of epidemic disease?

188. Does the expedient of relief centres as a substitute for village relief and an organized system of relief works in the early stages of distress commend itself to you ?

189. In your experience would it have been better to have completed the village relief arrangements and to have opened regular relief works at an early date than was actually the case in localities where relief centres were resorted to ?

190. Are there any special tracts of country or any particular conditions of the population which make relief centres preferable to village inspection and village relief and to regular relief works ?

191. Approximately what area was a relief centre expected to serve ?

192. Was voluntary unofficial agency available and utilised to any large extent in the working of relief centres ?

As to Relief Kitchens.

193. What is your view of the functions of relief kitchens at which cooked food is supplied to destitute persons without the condition of residence ?

194. Are they required chiefly in connection with relief works, for the non-working children and other dependants of relief workers, or may they advantageously be established elsewhere for the relief generally of the incapable poor ?

195. At the beginning or end of a famine to what extent is it expedient to substitute kitchens for gratuitous relief in the houses of the people ?

196. Was cooked food given at the relief kitchens to all applicants, or only to those furnished with a kitchen ticket by an officer or village headman ?

197. When such kitchens became numerous, was strict supervision over the persons in charge difficult to maintain ? Was there waste or misapplication of food ? What arrangements to prevent this were made ? Were the kitchens ordinarily placed under the direct charge of officials, or of zemindars and other private persons ?

198. Is it preferable to relieve the non-working children and other " dependants " of relief workers by means of cooked food, or by money doles to the parents ? In your experience could parents to whom money was given for this object be trusted to expend it on their children ?

As to loans to cultivators and landholders.

199. To what extent have State advances been made to land-owners and cultivators for land improvements, for seed-grain and cattle, and for subsistence, in the late famine ?

200. In the case of money advanced for land improvements, have the recipients, as a rule, spent it on the object for which it was lent, namely, on the employment of labour ? Or have they otherwise utilised it ?

201. Have the sums advanced for cattle and seed been of much benefit to the cultivating classes ? Could more money have thus been advantageously spent ?

202. What periods for recovery have been fixed for the different classes of advances ?

203. Have advances been given to land-owners and cultivators for purchase of food and under what restrictions as to the amount advanced and as to the time of the year in which the advance was made ?

204. Do you approve of the principle of such subsistence advances, or do you think that cultivators requiring money for food should be required to submit to the self-acting test of accepting work on a relief work ?

205. Is it more economical to aid by such advances cultivators who possess some property in land and cattle than to offer them work and wages ?

206. Would not every cultivator want to borrow instead of going to the relief works, and would not this mean a very large outlay by the State on loans and an increase of indebtedness among the cultivators ?

As to Suspensions and Remissions of Land-Revenue.

207. To what extent has land-revenue been suspended or remitted in the parts of your $\frac{\text{province}}{\text{district}}$ affected by the late famine ?

208. Have measures been taken to secure that the relief thus given reached the cultivating tenant ? Does the law provide for this ? If not, is legal provision desirable ?

209. Has this form of relief been of much advantage to the land-owning and cultivating classes? To what extent has it kept them from the relief works, or tended to prevent them from falling into debt?

210. Do you think that the land-revenue which has been suspended and not remitted will be recovered without pressing severely on the land-holders, should seasons be good?

211. Will such recovery be spread over several seasons by means of instalments? Will the corresponding rent suspended be distributed in similar instalments?

212. Does suspended rent carry interest? If so, ought it to do so?

213. Has the Government power to direct suspension of rent on estates held free of land-revenue, when it directs suspensions of rent and revenue on revenue-paying estates? Is such power necessary?

214. In regard to suspension and remission of land-revenue in temporarily settled tracts, do you think it might with advantage be made a general rule of practice that in regard to estates held by self-cultivating as distinct from rent-receiving owners, when the crop is reported to be, say, below a 4-anna one, and only sufficient to feed and clothe the owners and their dependants and cattle, the proper treatment is immediate remission, not suspension?

215. Can you form any idea to what extent the private indebtedness of the land-owning and cultivating classes has been increased through the famine? Do the stamp or registration receipts indicate increased borrowing and more transfers of land? Has the borrowing in many cases been on a scale which must involve ultimate ruin to the borrower?

As to the use made of Forests.

216. What measures were taken to open State and private forests to the people for grazing, or for collection of grass or leaves, or of edible fruits, roots and grass seeds; and what was the effect of such measures?

217. Do you think that the forests might have been more fully made available for these purposes than was the case?

218. Were any departmental operations undertaken for collection and despatch of compressed grass to the distressed tracts, and with what result?

219. What kind of food do the people get out of the forests?

As to orphans.

220. How should orphans who have been maintained by the State during famine be disposed of at the end of a famine.

221. In the case of orphans who, during the famine, have been temporarily made over by the relief officers to private orphanages and payment made by the State for their support, should the Government continue its aid to the private orphanages after the famine?

As to private Charitable Relief as auxiliary to State Relief.

222. Have you any suggestions to offer regarding the statement of the objects to which private subscriptions for relief of distress caused by famine may legitimately be applied as set forth in the *Gazette of India* of 9th January 1897.

223. Do you think any of these objects trench upon the field of Government relief operations?

224. In view of the fact that during the currency of a famine the Government makes itself responsible as far as may be practicable for the saving of life by all available means in its power, do you consider the statement of the second object satisfactory; if not, how should it be modified?

225. Do you think the second object could properly be restricted (*a*) to the giving of clothing and other extra comforts to the orphans, and (*b*) to meeting the cost of their education in some useful craft befitting their station in life and of their maintenance after the end of the famine?

226. Are any special rules or measures necessary to prevent overlapping of charitable and Government relief under object III; if so, what would you suggest?

227. Do you consider the opening of grain shops, where wholesome food-grains would be sold at rates below the prevailing market rates, a legitimate method of giving relief to respectable persons with small fixed incomes who, though suffering great privations from

abnormal rise in prices, would not accept purely gratuitous relief either from Government or from the Charity Fund?

228. Is the opening of these cheap grain shops likely to interfere with private trade, provided the benefit of them be extended only to a selected number of persons? Were such shops started in your district, and did they interfere with private trade?

229. Are you aware that the opening of these shops from the Indian Famine Charitable Relief Fund operated to steady the market and to prevent fitful raising of rates?

230. To render the help effective, do you think that the relief to broken-down agriculturists should not be confined to the period when acute distress is subsiding, but that it should be given just before the commencement of the agricultural season even though distress might then be at its height?

231. What class of agriculturists should generally be helped under object IV?

232. Do you think the Charity Fund could be properly applied in relieving agriculturists who are in a position to get statutory loans (*taccavi*) from the Government?

233. Do you think it could be usefully spent in supplementing *taccavi* advances where they are not enough to meet all the agricultural requirements of the recipient including the subsistence of himself and his family, during the interval between the sowing and the harvest?

234. Do you consider the operations of the Indian Famine Charitable Relief Fund as supplementary to Government relief have served a useful purpose; if so, in what way?

235. Can you describe briefly the nature and the extent of the relief granted from the Charity Fund in your province?

236. Can you give the number of persons relieved under each object in your province?

237. What form of relief under object I was the most popular and evoked the greatest gratitude?

238. What form of relief under object III did the greatest amount of good at the smallest cost to the Fund?

239. Do you think it was right to spend the bulk of the fund in helping broken-down agriculturists?

240. Do you think the expenditure of such a large portion of the fund under this head has, besides doing substantial good to the persons helped, resulted in great economic advantage to the country generally?

241. Can you state what is the approximate area sown with aid from the Charity Fund in your province?

As to Emigrants and Wanderers.

242. What arrangements were made for the relief of starving wanderers? Were the numbers of such wanderers so large as to attract attention? If so, to what causes was their presence due?

243. Would there have been so much wandering had more works been opened or village relief or relief centres more largely extended? Is it possible by any relief methods to prevent jungle people, or people with whom it is a custom to migrate at certain seasons of the year, from wandering?

244. Was the death-rate of the $\frac{\text{province}}{\text{district}}$ sensibly affected by deaths among wanderers in poor-houses or on relief works?

245. Were the wanderers persons ordinarily residing within your $\frac{\text{province}}{\text{district}}$ or were they from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States? If from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States, why were they attracted to your $\frac{\text{province}}{\text{district}}$?

246. Was any difference made in the treatment of wanderers from your own $\frac{\text{province}}{\text{district}}$ and those coming from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States?

247. How do you think wanderers or emigrants from other $\frac{\text{provinces}}{\text{districts}}$ or from Native States should be dealt with?

As to the mortality during the famine period.

248. What was the ratio of deaths per thousand of population in the famine area of your $\frac{\text{province}}{\text{district}}$ for the five-year period 1891—95 preceding the famine? What was this ratio during 1896 and 1897?

249. How far has the higher ratio in the latter two years been due directly to scarcity of food, or to the indirect effects of such scarcity?

250. If, in spite of the privations consequent on scarcity of food, there has been little or no increase in the ratio of mortality, do you attribute this result entirely to the success with which the distress has been met by relief measures?

251. In dry years, unaccompanied by scarcity, the health of the people, it is believed, is ordinarily very good and the mortality abnormally low? The year 1896 was an exceptionally dry year, and as a consequence the mortality would presumably, under ordinary circumstances, have been below the average; would it not seem reasonable to attribute to causes connected with scarcity not only all mortality in excess of the normal death-rate, but also the difference between the abnormally low death-rate of a year of light scanty rainfall and the normal death-rate of years of ordinary rainfall? Would not the compensating influence on the public health resulting from exceptional dryness of season tend to mask the full effects of scarcity of food?

252. On the other hand, an abnormally dry season often results in a short supply of potable water as well as to a concentration of impurities in such supply; do you attribute any part of the excessive mortality during the period of famine to this cause of unhealthiness? Do you think that cholera may have been originated or intensified by this cause?

253. Prevalence of bowel-complaints, dysentery and diarrhœa in communities leads to a suspicion that the food-supply is insufficient, or unwholesome or badly cooked. Did these diseases cause a high mortality in the famine area of your $\frac{\text{province}}{\text{district}}$, and could their prevalence be ascribed to an insufficient or unwholesome dietary?

254. Do you consider the diet supplied to the different classes of relief workers, to the poor-house inmates and to those fed at the kitchens, to have been sufficient to maintain the recipients in health? Would you, as a result of your own observations, suggest any alteration in the scale of diet laid down in the Famine Code?

255. Can you state the number of deaths which were directly due to starvation in your $\frac{\text{province}}{\text{district}}$ during the famine? Also the number of those who died indirectly from privation? Was the mortality greater amongst women than amongst men, and amongst children and the aged than amongst adults? Did parents frequently, under stress of want, neglect or abandon their children?

256. Of the deaths due to starvation, how many can you enumerate which could have been prevented by the timely intervention of the State? Explain, if you can, how in these cases the relief measures adopted by the State failed in saving life?

257. Were, in your opinion, the measures of State relief defective either in principle or in their working? Do you think the mortality amongst the people in receipt of State aid was to any extent due to insanitary conditions prevailing in the relief camps, poor-houses, and food kitchens, and can you make any proposals with the object of securing improved sanitary conditions in future famines? Was every practicable precaution taken to provide and protect against contamination of pure water-supplies for relief camps and poor-houses?

258. Was the staff of Medical Officers and Hospital Subordinates sufficient during the famine, and were they provided with an adequate supply of medicines and medical comforts for the use of the sick?

As to the Pressure of Population.

259. Has the population of your $\frac{\text{province}}{\text{district}}$ increased since the taking of the Census of 1871? If so, will you state what this increase has been from 1871 up to the end of 1896, this latter being probably the latest year for which the complete figures are available?

260. Is there any evidence of a continuous increase in the birth-rate or decrease in the death-rate?

261. What has the average increase of population been per cent. per annum for each year included in the period mentioned?

262. Do you attribute this increase solely to the natural and unrestrained fecundity of the people, or are there other, and, if so, what additional causes?

263. What effect on the growth of population in India would you assign to the enduring peace maintained within our borders, to the suppression of infanticide and widow-burning, to sanitary works and improvements, to the extension of vaccination, and to the strenuous endeavour to prevent the loss of a single life in periodically recurring famines?

264. Has the area under food-grains in your province/district increased *pari passu* with the increase of population? Or has the food-producing capacity of the province/district been increased by irrigation and improved methods of cultivation at a rate sufficient to meet the wants of the increasing population?

265. What importance do you assign to this growth of population in bringing about in ordinary years an increase in the price of food, and so rendering existence more difficult and precarious?

266. Have the wages of the labouring classes increased as rapidly as the prices of their food-stuffs?

267. Are increase of population and higher prices, unaccompanied by a corresponding rise in the wages of the working classes, indications of diminished stocks of food in the country? Would scarcity be likely to intensify more rapidly into actual famine under conditions of dearer food and a greater number of people earning low wages?

268. The immediate effects of irrigation works and improved methods of cultivation being assumed to increase the production of food for man and beast, what, in your opinion, would their more remote effects be? Would they in a population of great fecundity and exercising no restraint on such fecundity tend to cause the people again to multiply up to the limit beyond which the soil could not further support them?

269. How would you propose to obviate this tendency of the growth of population to press close upon the amount of food available for its support?

270. In England we know that the same problem has been solved by emigration to lands in need of population. Could the same solution be applied to India?

271. In England, unrestrained fecundity is confined mainly to the lower and more ignorant classes. The educated classes, with certain exceptions, exercise control and foresight with regard to the number of children they bring into the world. Is education, within a measurable period of time, likely to pervade the millions of India to such an extent as to lead them to practise similar control and precision?

272. Irrigation, we assume, increases the productiveness of the soil; it is also acknowledged to be concerned in the generation of malaria in many extensive tracts of the country. Malaria, we have proof, lessens the fecundity of the people. Do these facts suggest to you the involuntary establishment of an equilibrium between the population and the food production of irrigated tracts? Would such equilibrium, brought about in the way which these facts suggest, be a result to be desired?

As to the ordinary food of the people.

273. In the tracts liable to famine in your province/district, which are the food-grains ordinarily used in their homes by well-to-do labourers and artizans? Please answer separately, if necessary, for town and country and for winter and summer.

274. How many meals do they eat in the day, and of what eatables and drinkables does each meal ordinarily consist?

275. If any of the ordinary food-grains happen to be unprocurable, what other grains do they sometimes substitute?

276. Of these occasional substitutes, which do the people consider most and which least palatable and digestable?

277. What do they say in objection to other grains which might probably be substituted, but which they practically never use?

278. What food-grains were used in poor-houses and kitchens, and at relief works under your observation during the recent famine?

279. How many meals a day did the people get in poor-houses and kitchens, and of what eatables and drinkables did each meal consist?

280. What sort of complaints were made as to the kind of food or plan of meals?

281. How does the diet given at famine relief poor-houses and kitchens compare with the authorized scale of prison diet?

As to Food-stocks and Prices.

282. Was the great rise in prices of the common food-grains, which occurred in September to November 1896, and was more or less maintained for the next twelve months, in your opinion a reasonable rise? That is to say, was it fairly proportionate to the failure of harvests, lowness of local stocks, and cost of replenishing them? If you think the rise was more than reasonable, to what do you attribute it?

282-A. In market towns which came under your observation, was it possible to identify the persons who fixed the bazar or current rates of food-grains declared from time to time? How far were these current rates strictly followed by the local retail traders?

283. Do you think that the depreciation of the rupee in relation to gold which has been going on has any effect in the direction of making prices of food-grains jump up quicker and higher than formerly when crop failures occur? Has there been a permanent rise in the average price of food-grains in India within the last twenty years? Has the rise been greater in respect of some kinds of grain than of others?

283-A. What was the difference in prices prevailing in the distressed area under your observation, and in prices in neighbouring districts where the crops had not failed to such extent as to make relief necessary? Did the difference appear natural and reasonable in degree?

284. What material fluctuations of prices of grain occurred in the 12 months after 1st November 1896 in the distressed area under your observation? To what did they seem due, and was the trade sensitive? That is, did grain flow in quickly and freely in response to each rise of price from accessible markets where prices were lower? If not, state what in your opinion were the reasons or obstacles which impeded the activity of trade?

285. In the distressed districts under your observation, could the towns-people and villagers, who had money but no private stocks of their own, at all times buy their customary food-grains and condiments at the rates quoted in the nearest grain marts, or had they sometimes to pay much higher?

286. Were the people in receipt of relief in the shape of cash at works, or in the village, always able to buy grain at the rates supposed to be current?

287. Were food-grains of the common kinds exported from distressed tracts under your observation while the high prices prevailed? If so, was this due to still higher prices elsewhere, or to want of capital for large purchases in distressed tracts or some other reason?

288. Were fortunes made in the grain trade during the high prices? If so, by what classes and by what sort of trade or speculation? Was it genuine buying to put on the market, or of the nature of time bargain, or speculation for a rise?

289. Were the grain pits or godowns of the grain dealers for the most part opened and largely depleted at the close of the distress, or were many unopened and most but little depleted?

290. In distressed tracts under your observation had any of the cultivators and land-owners what may be considered surplus private stocks of food-grain? If so, did they generally sell such surplus or hold up all they had from panic or other reasons?

291. While the high prices prevailed, did those cultivators who had grain to sell to dealers, get prices as proportionately higher than usual as those the grain dealers were selling at?

292. Were the wholesale dealings between grain dealers at prices as near to retail prices as they usually are?

293. To what extent has the habit of storing food-grains in pits or other receptacles diminished among the grain dealers, landholders and cultivators of the tracts producing large crops of the common grains? What are the reasons for such diminution?

294. In such tracts have the railways and roads extended into them, had the effect of stimulating the export of the annual surplus production to seaports and to rich districts where more valuable crops are produced? When crops fail and prices go up in such tracts, is private trade ready to import freely into them?

295. To what extent were proprietors of land, State ryots and under-tenants among the classes which asked for and got relief?

296. To what classes did the mass of persons relieved belong?

297. To what was the inability of the distressed people to buy grain at the high prices principally due? Did non-agricultural employment of labour fall off as much as agricultural employment?

298. Did wages of any class of labourers, artizans, or servants go up in any degree in consequence of the rise of prices? If not, why not?

299. Has competition of foreign goods or of goods produced by Indian mills seriously reduced the purchasing power of any class of artizans or labourers in the tracts under your observation?

300. Can you compare recent with former famines, and say whether the different classes of people seemed this time to have more or less power of resisting destitution?

301. Do you observe any change in their attitude of reluctance to go to poor-houses or to relief works?

302. Did they sell jewelry, brass pots, and cattle, as much as formerly? Did fall in value of silver jewelry make them reluctant to sell it?

303. What action, if any, was taken by officers of Government in the affected area under your observation to encourage importation of food-grains, or otherwise stimulate the activity of private trade? What was the result for good or bad of such action?

303-A. What action was taken, if any, in any locality under your observation to supplement or stimulate activity of local grain-dealers in importing food-grain? What was the result?

304. Suppose that instead of relying entirely upon the action of private trade and the Indian market, the Government had resolved to import grain from abroad to a notified amount and for a strictly limited purpose, that is, for use at a large number of its poor-houses, kitchens, and relief works: suppose also that Government so imported either directly or through contractors, and adopted all possible precautions against obstructing the movements of private trade: what effect in your opinion would such action have had (1) on the cost of relief to the State; (2) on the prices of food-grains in the bazars or open markets; (3) on the activity of private trade?

305. In the districts under your observation had you ever good reason to believe in the existence of local rings of grain-dealers formed to keep up prices of food-grains above the rates naturally resulting from the law of supply and demand? If so, how far did such rings succeed in their purpose, and for how long?

If you think such rings can be successfully formed at the present day in India, can you suggest any legitimate method of breaking them, which would in your opinion have the desired effect, and be on the whole distinctly advantageous?

*Regarding the grain trade.**

306. How far and in what ways was the export by sea of the various food-grains affected by the famine and scarcity?

307. How far and in what ways was the export by sea of other commodities affected?

308. How far and in what ways was the import by sea—(1) of food-grains, (2) of other commodities, affected?

309. Is there any evidence that a permanent rise in the price of food-grains in India has taken place of late years?

310. If such a rise has occurred, do you think that it is in any way connected with the fall in the Indian exchange?

311. Is the export of food-grains from India in a series of years on such a scale as to materially affect the ability of the country to feed the population, or to materially reduce the reserve stocks held at a particular point of time in the country?

312. In ordinary years is the import of food-grains by sea, for consumption in the port-town and for distribution into the interior large?

313. Is this trade in the hands of European or native firms?

314. What grains are chiefly imported and from what foreign ports?

315. When prices of food-grains rose rapidly at the end of 1896, were the stocks of rice and other food-grains large in the port?

316. So far as the information went, were food stocks large in the interior of the country, or in any particular province? What was the general impression as to the extent to which these stocks would prove sufficient for the food requirements of the country without importation from abroad, and would be placed on the market, or held up?

317. Did the high prices reached at the end of 1896 lead to much speculative dealings in grain?

318. Where these high prices maintained? Where they followed by an active import of grain from foreign ports?

319. Did the price of rice in Burma and of wheat and maize in Europe and America rise in consequence of apprehension of diminished food exports from, or of an anticipated demand on account of, India?

320. Were shipments of grain made from American or European ports to India? If they were only on small scale, what was the cause?

321. Was there a sufficient margin at the end of 1896 between the prices of wheat or maize in India and the prices of these grains in Europe and America to make import into India profitable?

322. If such a margin existed, but grain was not imported, what were the obstacles in the way of the establishment of the trade?

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* NOTE.—These questions are intended for witnesses put forward by the Chambers of Commerce; and for experts specially invited by the Commission to give evidence.

323. In ordinary years what quantity of rice does Burma export to India and other countries? Please give figures showing the distribution.

324. From November 1896 to October 1897 what quantity of Burma rice was imported into this port?

325. Were these imports mainly for despatch to the interior?

326. Were the firms on whose account these Burma imports were made chiefly European or native firms?

327. Were these imports made on the order of up-country grain-dealers for Burma rice, or by Calcutta firms at their own risk in anticipation of the demand of up-country dealers?

328. Was any difficulty at first experienced in getting up-country grain-dealers to take Burma rice, and did stocks in consequence tend to accumulate and the price to fall in the port?

329. Was there always a profitable margin between rice prices in Burma and here to admit of continuous import here?

330. It has been stated that in the event of India requiring large imports of grain from America or Europe, European firms at the ports would find more difficulty in engaging in such import trade than in the case of the grain-export trade; that is to say, the reversal of the ordinary process of trade would be accompanied by special risks and difficulties. Is this so?

331. The largest export houses have, it is believed, many up-country agents in the interior who place contracts for purchase of grain for export with native grain-dealers. In the event of India requiring to import grain, could not contracts for sales of grain be placed with up-country dealers by the same agency?

332. Would the ordinary course of trade be for the European importing house to deal with the native firms in the port, and for those firms to place the grain in the up-country markets? Would the European houses import at their own risk, or only in fulfilment of contracts with native firms?

333. Within how many days could 20,000 or 30,000 tons of wheat or maize be landed in India from Europe or America after a contract had been placed in this port?

334. In that interval prices in India might have so fallen as to prevent the importer from making the profit he had anticipated?

335. Is this contingency one of the causes which might prevent grain from being imported from distant countries to India, in spite of prices being so high for the time being in India as to hold out expectations of considerable profit?

336. Might there be a serious panic in the Indian grain markets, resulting in dealers refusing to sell or extremely high prices being asked, without its leading to imports from abroad being arranged for?

337. Do you think that the offer of a bounty on each ton imported, or the direct purchase by Government of grain for feeding the poor on relief works, would have eased the market? To what extent would any such measure have discouraged private trade?

338. What would have been the effect in the grain markets of foreign countries of intelligence that the Indian Government was purchasing, or encouraging the importation of grain? Was the want of activity in the grain import trade from America or Europe in any way due to the dearness of money in India in the winter of 1896-97, and to difficulty in obtaining accommodation? If so, could Government with advantage have stimulated import by loans or contracts?

339. The relief workers were paid a cash wage sufficient to enable them to buy a stated quantity of food, the wage varying week by week with the local grain-prices. If Indian food-prices throughout the famine were lower than the price at which grain could be laid down in India from Europe or America, might not importation by Government of food for some of the relief works have made those particular relief operations costlier than they have actually been?

340. Would this disadvantage have been compensated by a lowering of prices in India owing to which other relief works would have been less costly, and the public would have been enabled to buy food at lower rates?

341. If we may suppose that prices would have fallen in consequence of the Government undertaking to import from abroad to feed the relief workers, would this have caused less rice from Burma to have been imported?

342. What reductions were made in railway rates on grain from the sea-board to the interior, and had such reductions an effect on trade?

343. Can you think of any possible combination of circumstances under which it would be advisable for the Indian Government to import foreign grain itself for its relief purposes, or to stimulate such import by the trade by loans, contracts, or bounties?

344. Was there ever a time during the recent famine when Government might, in your opinion, have tried such measures with advantage?

345. Can you conceive of any case in which prohibition of exports would in your opinion be of advantage?

Special questions for Burma.

1. What was the effect of the famine in India on the export trade of Burma:—

(i) Rice?

(ii) Other commodities?

2. Give the current wholesale prices of rice in the Rangoon market for each fortnight from 1st September 1896 to 31st October 1897.

2 (*a*). Give particulars of the monthly exports of rice from Burman ports to Indian and foreign ports from 1st November 1896 to 31st October 1897, showing ports to which consigned.

3. How did the rates for freight to India during above period, 1st November 1896 to 31st October 1897, compare with the normal rates?

4. Was rice exported from Lower into Upper Burma during the above period, and if so, how do the quantities so exported compare with those of normal years?

5. What was the estimated surplus of rice available for export (including the harvest yield of 1896-97) in Lower Burma at commencement and end of the above period?

6. What are the export duties imposed on rice.

7. Are there any duties on rice exported to Indian ports?

8. Is there room for any great extension of the areas under rice cultivation in Lower Burma in the future?

9. Are there indications that the area under rice cultivation is extending in Lower Burma? If so, how does the increase compare in degree with the increase in demand for local consumption due to growth of population?

10. Do you consider that the removal of the export duty on rice would result in a considerable extension of the area under rice cultivation or in a great increase in the annual outturn?

11. Is rice carried from the interior to the sea-board mainly by water or to a great extent by rail?

12. What are the rates for carriage of rice by rail per ton per mile, and were the rates reduced during the period referred to?

13. Do you consider that the cultivation of rice in Lower Burma could be greatly stimulated by improvements in or additions to the present system of inland communications?

14. What addition may be anticipated to the area annually cultivated for rice in Upper Burma by completion of the various major irrigation works that are considered feasible, and what would be the corresponding increase in the annual outturn of rice?

15. What may be taken as the probable total capital cost of these projects?

16. May any considerable increase be anticipated in the area under rice cultivation dependent upon minor irrigation works in Upper Burma, if the present assignments for these works (Rs. 8,00,000 per annum) are maintained?

17. Will the completion of the major irrigation works that may be proposed for Upper Burma and the improvements and extensions of the minor works render that portion of the province independent of Lower Burma even in dry years in future and protect it completely against famine?

Relief works.

Questions 50, 57, 61 to 70, 71 to 83.

New question 73-A.—Were relief labourers transferred by rail over considerable distances during the recent famine, and if so, were the results satisfactory?

Questions 84 to 108, 113, 114 to 123, 124 to 132, 133 to 139.

Gratuitous relief, poor-houses and relief centres, mortality—148 to 247, 257.

Ordinary food—273 to 281.

Food stocks—282 to 305.

Extent of distress—1 to 9.

Departures from prescriptions of the Famine Code—39 to 49.

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